## ENVIRONMENTAL PROTECTION AGENCY

## **40 CFR Part 52**

EPA-R06-OAR-2008-0702; [FRL 9662-7]

Approval and Promulgation of State Implementation Plans; City of Albuquerque-Bernalillo County, New Mexico; Interstate Transport Affecting Visibility and Regional Haze Rule Requirements for Mandatory Class I Areas

**AGENCY**: Environmental Protection Agency (EPA).

**ACTION**: Proposed Rule.

SUMMARY: The EPA is proposing to approve revisions to the State Implementation Plan (SIP) for the City of Albuquerque – Bernalillo County, New Mexico submitted by the Governor of New Mexico on July 28, 2011 addressing the regional haze requirements for the mandatory Class I areas under 40 CFR 51.309. The EPA is proposing to find that these revisions and associated rules meet the requirements of the Clean Air Act (CAA) and comply with the provisions of 40 CFR 51.309, thereby meeting requirements for reasonable progress for the 16 Class I areas covered by the Grand Canyon Visibility Transport Commission Report for approval of the plan through 2018. We are proposing to approve SIP submissions offered as companion rules to the Section 309 regional haze plan, specifically, rules for the Sulfur Dioxide Emissions Inventory Requirements and the Western Backstop Trading Program, submitted on December 26, 2003, September 10, 2008, and May 24, 2011, and rules for Open Burning, submitted on

December 26, 2003 and July 28, 2011. We are also proposing to approve a portion of the SIP revision submitted by the City of Albuquerque - Bernalillo County, New Mexico on July 30, 2007, for the purpose of addressing the "good neighbor" provisions of the CAA section 110(a)(2)(D)(i) for the 1997 8-hour ozone NAAQS and the PM<sub>2.5</sub> NAAQS.

**DATES**: Comments must be received on or before [Insert date 30 days after publication in the Federal Register].

**ADDRESSES**: Submit your comments, identified by Docket ID No. EPA-R06-OAR-2008-0702, by one of the following methods:

- Federal e-Rulemaking Portal: http://www.regulations.gov. Follow the online instructions for submitting comments.
- E-mail: R6air\_bchaze@epa.gov
- Mail: Mr. Michael Feldman, Air Planning Section (6PD-L), Environmental Protection
   Agency, 1445 Ross Avenue, Suite 1200, Dallas, Texas 75202-2733.
- Hand or Courier Delivery: Mr. Michael Feldman, Air Planning Section (6PD-L),
   Environmental Protection Agency, 1445 Ross Avenue, Suite 1200, Dallas, Texas
   75202-2733. Such deliveries are accepted only between the hours of 8 a.m. and 4
   p.m. weekdays, and not on legal holidays. Special arrangements should be made for deliveries of boxed information.
- Fax: Mr. Michael Feldman, Air Planning Section (6PD-L), at fax number 214-665-7263.

Instructions: Direct your comments to Docket No. EPA-R06-OAR-2008-0702. Our policy is that all comments received will be included in the public docket without change and may be made available online at www.regulations.gov, including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through www.regulations.gov or e-mail. The www.regulations.gov web site is an "anonymous access" system, which means we will not know your identity or contact information unless you provide it in the body of your comment. If you send an e-mail comment directly to us without going through www.regulations.gov your e-mail address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, we recommend that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If we cannot read your comment due to technical difficulties and cannot contact you for clarification, we may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses.

*Docket*: All documents in the docket are listed in the *www.regulations.gov* index. Although listed in the index, some information is not publicly available, e.g., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available either electronically in www.regulations.gov or in hard copy at the Air Planning Section (6PD-L),

Environmental Protection Agency, 1445 Ross Avenue, Suite 700, Dallas, Texas 75202-2733. The file will be made available by appointment for public inspection in the Region 6 FOIA Review Room between the hours of 8:30 a.m. and 4:30 p.m. weekdays except for legal holidays. Contact the person listed in the **FOR FURTHER INFORMATION CONTACT** paragraph below or Mr. Bill Deese at 214-665-7253 to make an appointment. If possible, please make the appointment at least two working days in advance of your visit. There will be a 15 cent per page fee for making photocopies of documents. On the day of the visit, please check in at our Region 6 reception area at 1445 Ross Avenue, Suite 700, Dallas, Texas.

The City of Albuquerque-Bernalillo County submittal is also available for public inspection during official business hours, by appointment, at 1 Civic Plaza, Room 3047, Albuquerque, NM, 87102.

**FOR FURTHER INFORMATION CONTACT:** Michael Feldman, Air Planning Section (6PD-L), Environmental Protection Agency, Region 6, 1445 Ross Avenue, Suite 700, Dallas, Texas 75202-2733, telephone 214-665-9793; fax number 214-665-7263; e-mail address *feldman.michael@epa.gov*.

#### SUPPLEMENTARY INFORMATION:

#### **Definitions**

For the purpose of this document, we are giving meaning to certain words or initials as follows:

- The words or initials <u>Act</u> or <u>CAA</u> mean or refer to the Clean Air Act, unless the context indicates otherwise.
- ii. The words <u>EPA</u>, <u>we</u>, <u>us</u> or <u>our</u> mean or refer to the United States Environmental Protection Agency.
- iii. The initials SIP mean or refer to State Implementation Plan.
- iv. The initials RH and RHR mean or refer to Regional Haze and Regional Haze Rule.
- v. The initials <u>BC</u> and the words <u>Albuquerque</u> and <u>Bernalillo County</u> mean the City of Albuquerque-Bernalillo County, New Mexico
- vi. The initials <u>AQCB</u> mean or refer to the Albuquerque/Bernalillo County Air Quality Control Board.
- vii. The initials **BART** mean or refer to Best Available Retrofit Technology.
- viii. The initials OC mean or refer to organic carbon.
  - ix. The initials EC mean or refer to elemental carbon.
  - x. The initials <u>VOC</u> mean or refer to volatile organic compounds.
- xi. The initials **EGUs** mean or refer to Electric Generating Units.
- xii. The initials  $\underline{NO}_x$  mean or refer to nitrogen oxides.
- xiii. The initials  $\underline{SO}_2$  mean or refer to sulfur dioxide.
- xiv. The initials  $\underline{PM_{10}}$  mean or refer to particulate matter with an aerodynamic diameter of less than 10 micrometers.
- xv. The initials  $\underline{PM_{2.5}}$  mean or refer to particulate matter with an aerodynamic of less than 2.5 micrometers.
- xvi. The initial <u>RPGs</u> mean or refer to reasonable progress goals.
- xvii. The initials RPOs mean or refer to regional planning organizations.

- xviii. The initials WRAP mean or refer to the Western Regional Air Partnership
  - xix. The initials GCVTC mea or refer to the Grand Canyon Visibility Transport Commission

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# I. Overview of Proposed Action

# A. Regional Haze

As explained in further detail below, 40 CFR 51.309 presents certain Western states within the Grand Canyon Visibility Transport Commission the option of fulfilling the regional haze rule (RHR) requirements for 16 Class I areas under the provisions of that section, rather than under 40 CFR 51.308. Three states—Wyoming, Utah, and New Mexico--have elected to submit a SIP under 40 CFR 51.309. The Albuquerque/Bernalillo County Air Quality Control Board (AQCB) is the federally delegated air quality authority for the City of Albuquerque and Bernalillo County, New Mexico (BC). The AQCB is authorized to administer and enforce the CAA and the New Mexico Air Quality Control

Act, and to require local air pollution sources to comply with air quality standards. The AQCB has submitted a Section 309 regional haze SIP for its geographic area of New Mexico under the New Mexico Air Quality Control Act (section 74-2-4). This SIP submittal is a necessary component of the regional haze plan for the entire State of New Mexico and is also necessary to ensure the requirements of section 110(a)(2)(D) of the CAA are satisfied for the entire State of New Mexico. The AQCB submitted its RH SIP to the EPA on July 28, 2011. Our review of the BC RH SIP is supported by the review of companion rules discussed and relied upon in the BC RH SIP; these rules were submitted in multiple SIP revisions. These submittals request approval of: 20.11.46 NMAC, Sulfur Dioxide Emission Inventory Requirements; Western Backstop Sulfur Dioxide Trading Program and 20.11.21 NMAC, Open Burning.

The EPA is proposing to approve the BC RH SIP, that was submitted to satisfy the requirements of 40 CFR 51.309, and the related submittals that help address discrete requirements of Section 309. Among these requirements, Section 309 calls for plans to include a market trading program, conventionally known as the 309 backstop-trading program; this program will not be effective until the EPA has finalized action on all section 309 SIPs. Section 51.309 does not require the participation of a certain number of states to validate its effectiveness. Utah submitted its 309 SIP to the EPA on May 26, 2011, Wyoming submitted its 309 SIP to the EPA on January 12, 2011, and the State of New Mexico submitted its 309 SIP to the EPA on June 28, 2011 (received July 5, 2011).

<sup>&</sup>lt;sup>1</sup> The contents of the July 28, 2011 submittal may be examined in the docket that has been established for this rulemaking.

The EPA intends to propose action on Wyoming, Utah and New Mexico's 309 SIPs in separate actions. Once the EPA takes final action approving the necessary components of the 309 backstop-trading program to operate in all of the jurisdictions electing to submit 309 SIPs, the program will become effective.

To help address the requirements for a 309 backstop-trading program, Albuquerque-Bernalillo County submitted 20.11.46 NMAC, *Sulfur Dioxide Emission Inventory*\*Requirements; Western Backstop Sulfur Dioxide Trading Program, with initial adoption on December 26, 2003, and later revisions submitted on September 10, 2008, and May 24, 2011. We are proposing to approve 20.11.46 NMAC as received in these submittals. We are also proposing to approve 20.11.21 NMAC, \*Open Burning\* (submitted after initial adoption on December 26, 2003, with revisions submitted on July 28, 2011). Further details and analyses on these companion regulations are provided in the Technical Support Document in the docket for this rulemaking. These rules are also discussed at later points in this notice when they are relevant to our analysis of the BC RH SIP submittal.

As previously stated, the EPA is proposing to approve a City of Albuquerque – Bernalillo County SIP revision submitted on July 28, 2011 that addresses the regional haze requirements for the mandatory Class I areas under 40 CFR 51.309. The EPA is proposing to find that the SIP meets the requirements of 40 CFR 51.309. We are proposing to approve all parts of the RH SIP. We further note that the July 28, 2011 submittal we are proposing to act on builds and relies on earlier RH SIPs submitted on

December 26, 2003, and September 10, 2008.

# **B.** Interstate Transport and Visibility

We are also proposing to approve a portion of the SIP revision submitted to us by the City of Albuquerque-Bernalillo County, New Mexico on July 30, 2007, for the purpose of addressing the "good neighbor" provisions of the CAA section 110(a)(2)(D)(i) for the 1997 8-hour ozone NAAQS and the PM2.5 NAAQS.<sup>2</sup> Section 110(a)(2)(D)(i)(II) of the Act requires that states have a SIP, or submit a SIP revision, containing provisions "prohibiting any source or other type of emission activity within the state from emitting any air pollutant in amounts which will . . . interfere with measures required to be included in the applicable implementation plan for any other State under part C [of the CAA]...to protect visibility." Because of the impacts on visibility from the interstate transport of pollutants, we interpret the "good neighbor" provisions of section 110 of the Act described above as requiring states to include in their SIPs either measures to prohibit emissions that would interfere with the reasonable progress goals set to protect Class I areas in other states, or a demonstration that emissions from BC sources and activities will not have the prohibited impacts on other states' existing SIPs.

The AQCB stated in its submittal that it is not possible to assess whether there is any interference with the measures in the applicable SIP for another state designed to protect

<sup>&</sup>lt;sup>2</sup> This SIP revision is viewable in EPA docket EPA-R06-OAR-2007-1119, which was established for our prior approval of a portion of the SIP revision on November 8, 2010. 75 FR 68447.

visibility for the 8-hour ozone and PM2.5 NAAQS until AQCB submits and the EPA approves BC's RH SIP. In developing their Regional Haze SIP, BC and potentially impacted States collaborated through the WRAP. Each State developed its Regional Haze Plans and RPGs based on the WRAP modeling and technical analysis. The WRAP modeling was based in part on the emissions reductions each state and BC intended to achieve by 2018.

We are proposing to approve the BC RH SIP and find that it demonstrates that sources within the City of Albuquerque/Bernalillo County do not cause or contribute to visibility impairment at Class I areas outside of the City and Bernalillo County. We also propose to find that the BC RH SIP appropriately includes participation in a SO2 emission milestone and backstop trading program with the states of New Mexico, Wyoming and Utah. We also propose to find that the BC RH SIP contains those measures included in the WRAP modeling and relied upon by New Mexico and other States in developing their visibility programs. On the basis of these findings, we are also proposing to approve the City of Albuquerque-Bernalillo County Interstate Transport SIP submittal that addresses the visibility requirement of section 110(a)(2)(D)(i)(II) that emissions from sources within the City of Albuquerque and Bernalillo County do not interfere with measures of other states to protect visibility.

#### II. What is the Background for Our Proposed Actions?

## A. Regional Haze

RH is visibility impairment that is produced by a multitude of sources and activities which are located across a broad geographic area and emit fine particles (PM<sub>2.5</sub>) (e.g., sulfates, nitrates, organic carbon, elemental carbon, and soil dust) and their precursors (e.g., SO<sub>2</sub>, nitrogen oxides (NO<sub>x</sub>), and in some cases, ammonia (NH<sub>3</sub>) and volatile organic compounds (VOCs)). Fine particle precursors can react in the atmosphere to form PM<sub>2.5</sub>. PM<sub>2.5</sub> impairs visibility by scattering and absorbing light. Visibility impairment reduces the clarity, color, and visible distance that one can see. PM<sub>2.5</sub> also can cause serious health effects and mortality in humans and contributes to environmental effects such as acid deposition and eutrophication.

Data from the existing visibility monitoring network, the "Interagency Monitoring of Protected Visual Environments" (IMPROVE) monitoring network, show that visibility impairment caused by air pollution occurs virtually all the time at most national park and wilderness areas. The average visual range<sup>3</sup> in many Class I areas (i.e., national parks and memorial parks, wilderness areas, and international parks meeting certain size criteria) in the western United States is 100-150 kilometers, or about one-half to two-thirds of the visual range that would exist without anthropogenic air pollution. 64 FR 35714, 35715 (July 1, 1999). In most of the eastern Class I areas of the United States, the average visual range is less than 30 kilometers, or about one-fifth of the visual range that would exist under estimated natural conditions. *Id.* 

Visual range is the greatest distance, in kilometers or miles, at which a dark object can be viewed against the sky.

In section 169A of the 1977 Amendments to the CAA, Congress created a program for protecting visibility in the nation's national parks and wilderness areas. This section of the CAA establishes as a national goal the "prevention of any future, and the remedying of any existing, impairment of visibility in mandatory Class I Federal areas<sup>4</sup> which impairment results from man-made air pollution." CAA § 169A(a)(1). The terms "impairment of visibility" and "visibility impairment" are defined in the Act to include a reduction in visual range and atmospheric discoloration. *Id.* section 169A(g)(6). In 1980, we promulgated regulations to address visibility impairment in Class I areas that is "reasonably attributable" to a single source or small group of sources, i.e., "reasonably attributable visibility impairment" (RAVI). 45 FR 80084 (December 2, 1980). These regulations represented the first phase in addressing visibility impairment. We deferred action on RH that emanates from a variety of sources until monitoring, modeling and scientific knowledge about the relationships between pollutants and visibility impairment improved.

Congress added section 169B to the CAA in 1990 to address RH issues, and we promulgated regulations addressing RH in 1999. 64 FR 35714 (July 1, 1999), codified at

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Areas designated as mandatory Class I Federal areas consist of national parks exceeding 6000 acres, wilderness areas and national memorial parks exceeding 5000 acres, and all international parks that were in existence on August 7, 1977. See CAA section 162(a). In accordance with section 169A of the CAA, EPA, in consultation with the Department of Interior, promulgated a list of 156 areas where visibility is identified as an important value. See 44 FR 69122, November 30, 1979. The extent of a mandatory Class I area includes subsequent changes in boundaries, such as park expansions. CAA section 162(a). Although states and tribes may designate as Class I additional areas which they consider to have visibility as an important value, the requirements of the visibility program set forth in section 169A of the CAA apply only to "mandatory Class I Federal areas." Each mandatory Class I Federal area is the responsibility of a "Federal Land Manager" (FLM). See CAA section 302(i). When we use the term "Class I area" in this action, we mean a "mandatory Class I Federal area."

40 CFR part 51, subpart P. The Regional Haze Rule (RHR) revised the existing visibility regulations to integrate into the regulations provisions addressing RH impairment and established a comprehensive visibility protection program for Class I areas. The requirements for RH, found at 40 CFR 51.308 and 51.309, are included in our visibility protection regulations at 40 CFR 51.300-309. Some of the main elements of the RH requirements are summarized in section III. The requirement to submit a RH SIP applies to all 50 states, the District of Columbia and the Virgin Islands. States were required to submit the first implementation plan addressing RH visibility impairment no later than December 17, 2007. 40 CFR 51.308(b).

# B. Roles of Agencies in Addressing Regional Haze

Successful implementation of the RH program will require long-term regional coordination among states, tribal governments and various federal agencies. As noted above, pollution affecting the air quality in Class I areas can be transported over long distances, even hundreds of kilometers. Therefore, to address effectively the problem of visibility impairment in Class I areas, states need to develop strategies in coordination with one another, taking into account the effect of emissions from one jurisdiction on the air quality in another.

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Albuquerque/Bernalillo County in New Mexico must also submit a regional haze SIP to completely satisfy the requirements of section 110(a)(2)(D) of the CAA for the entire State of New Mexico under the New Mexico Air Quality Control Act (section 74-2-4).

Because the pollutants that lead to RH can originate from sources located across broad geographic areas, we have encouraged the states and tribes across the United States to address visibility impairment from a regional perspective. Five regional planning organizations (RPOs) were developed to address RH and related issues. The RPOs first evaluated technical information to better understand how their states and tribes impact Class I areas across the country, and then pursued the development of regional strategies to reduce emissions of particulate matter (PM) and other pollutants leading to RH.

The Western Regional Air Partnership (WRAP) RPO is a collaborative effort of state governments, tribal governments, and various federal agencies established to initiate and coordinate activities associated with the management of regional haze, visibility and other air quality issues in the western United States. WRAP member state governments include: Alaska, Arizona, California, Colorado, Idaho, Montana, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington, and Wyoming. The AQCB staff participated in meetings with the State of New Mexico staff to coordinate its efforts with the State of New Mexico in developing its separate 309 SIP.

#### C. Development of the Requirements for 40 CFR 51.309

The EPA's RHR provides two paths to address regional haze. One is 40 CFR 51.308, requiring states to perform individual point source BART determinations and evaluate the need for other control strategies. These strategies must be shown to make "reasonable progress" in improving visibility in Class I areas inside the state and in neighboring

jurisdictions. The other path for addressing regional haze is through 40 CFR 51.309 (section 309), and is an option for nine states termed the "Transport Region States" which include: Arizona, California, Colorado, Idaho, Nevada, New Mexico, Oregon, Utah, and Wyoming, and the 211 Tribes located within those states.

Section 309 requires participating states to adopt regional haze strategies that are based on recommendations from the Grand Canyon Visibility Transport Commission (GCVTC) for protecting the 16 Class I areas in the Colorado Plateau area. The EPA established the GCVTC on November 13, 1991. The purpose of the GCVTC was to assess information about the adverse impacts on visibility in and around 16 Class I areas on the Colorado Plateau region and to provide policy recommendations to the EPA to address such impacts. Section 169B of the CAA called for the GCVTC to evaluate visibility research as well as other available information pertaining to adverse impacts on visibility from potential or projected growth in emissions from sources located in the region. It was determined that all transport region states impacted or could potentially impact the Class I areas on the Colorado Plateau. The GCVTC submitted a report to the EPA in 1996 with its policy recommendations. Provisions of the 1996 GCVTC report include: strategies for addressing smoke emissions from wildland fires and agricultural burning; provisions to prevent pollution by encouraging renewable energy development; and provisions to

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<sup>&</sup>lt;sup>6</sup> The Colorado Plateau is a high, semi-arid tableland in southeast Utah, northern Arizona, northwest New Mexico, and western Colorado. The 16 mandatory Class I areas are as follows: Grand Canyon National Park, Mount Baldy Wilderness, Petrified Forest National Park, Sycamore Canyon Wilderness, Black Canyon of the Gunnison National Park Wilderness, Flat Tops Wilderness, Maroon Bells Wilderness, Mesa Verde National Park, Weminuche Wilderness, West Elk Wilderness, San Pedro Parks Wilderness, Arches National Park, Bryce Canyon National Park, Canyonlands National Park, Capital Reef National Park, and Zion National Park.

manage clean air corridors, mobile sources, and wind-blown dust, among other things.

The EPA codified these recommendations as part of the 1999 RHR.

The EPA determined that the GCVTC strategies would provide for reasonable progress in mitigating regional haze if supplemented by an annex containing quantitative emission reduction milestones and provisions for a trading program or other alternative measure (64 FR 35749 and 35756). Thus, the 1999 RHR required that western states submit an annex to the GCVTC report with quantitative milestones and detailed guidelines in order to establish the GCVTC recommendations as an alternative approach to fulfilling the section 308 requirements for compliance with the RHR. In September 2000, the WRAP, which is the successor organization to the GCVTC, submitted to the EPA an annex to the GCVTC. The annex contained SO<sub>2</sub> emission reduction milestones and the detailed provisions of a backstop trading program to be implemented automatically if voluntary measures failed to achieve the milestones. The EPA codified the annex on June 5, 2003 as 40 CFR 51.309(h). 68 FR 33764.

Five western states submitted implementation plans under the section 309 alternative program in 2003. The EPA was challenged by the Center for Energy and Economic Development (CEED) on the validity of the annex provisions. In *CEED v. EPA*, the D.C. Circuit vacated the EPA's approval of the WRAP annex (*Center for Energy and Economic Development v. EPA*, No. 03-1222 (D.C. Cir. Feb. 18, 2005)). In response to the court's decision, the EPA vacated the annex requirements adopted as 40 CR 51.309(h), but left in place the stationary source requirements in 40 CFR 51.309(d)(4). 71

FR 60612. The requirements under 40 CFR 51.309(d)(4) contain general requirements pertaining to stationary sources and market trading, and allow states to adopt alternatives to the point source application of BART.

## D. The 1997 NAAQS for Ozone and PM<sub>2.5</sub> and CAA 110(a)(2)(D)(i)

On July 18, 1997, we promulgated new NAAQS for 8-hour ozone and for PM<sub>2.5</sub>. 62 FR 38652. Section 110(a)(1) of the CAA requires states to submit SIPs to address a new or revised NAAQS within 3 years after promulgation of such standards, or within such shorter period as we may prescribe. Section 110(a)(2) of the CAA lists the elements that such new SIPs must address, including section 110(a)(2)(D)(i), which pertains to the interstate transport of certain emissions. Thus, states were required to submit SIPs that satisfy the applicable requirements under sections 110(a)(1) and (2), including the requirements of section 110(a)(2)(D)(i), by July 2000. States, including the City of Albuquerque/Bernalillo County, did not meet the statutory July 2000 deadline for submission of these SIPs. Accordingly, on April 25, 2005, the EPA made findings of failure to submit, notifying all states, including the City of Albuquerque/Bernalillo County, of their failure to make the required SIP submission to address interstate transport under section 110(a)(2)(D)(i). 70 FR 21147.

On August 15, 2006, we issued our "Guidance for State Implementation Plan (SIP) Submissions to Meet Current Outstanding Obligations Under Section 110(a)(2)(D)(i) for the 8-Hour Ozone and PM<sub>2.5</sub> National Ambient Air Quality Standards" (2006 Guidance).

We developed the 2006 Guidance to make recommendations to states for making submissions to meet the requirements of section 110(a)(2)(D)(i) for the 1997 8-hour ozone standards and the 1997 PM<sub>2.5</sub> standards.

As identified in the 2006 Guidance, the "good neighbor" provisions in section 110(a)(2)(D)(i) of the CAA require each state to submit a SIP that prohibits emissions that adversely affect another state in the ways contemplated in the statute. Section 110(a)(2)(D)(i) contains four distinct requirements related to the impacts of interstate transport. The SIP must prevent sources in the state from emitting pollutants in amounts which will: (1) contribute significantly to nonattainment of the NAAQS in other states; (2) interfere with maintenance of the NAAQS in other states; (3) interfere with provisions to prevent significant deterioration of air quality in other states; or (4) interfere with efforts to protect visibility in other states. In this action, we only address the fourth element regarding visibility.

The 2006 Guidance stated that states may make a simple SIP submission confirming that it is not possible at that time to assess whether there is any interference with measures in the applicable SIP for another state designed to "protect visibility" for the 8-hour ozone and PM<sub>2.5</sub> NAAQS until RH SIPs are submitted and approved. RH SIPs were required to be submitted by December 17, 2007. *See* 74 FR 2392 (January 15, 2009).

The EPA received a SIP revision adopted by AQCB on September 12, 2007 to address the interstate transport provisions of CAA 110(a)(2)(D)(i) for the 1997 ozone and PM<sub>2.5</sub>

NAAQS. For the reasons discussed in section V of this proposed rulemaking, we propose to find the AQCB adequately demonstrated that it is improbable that emissions from within the City of Albuquerque and Bernalillo County cause or contribute to visibility impairment at any Class I area. Therefore, we are proposing to approve the portion of the City of Albuquerque-Bernalillo County Interstate Transport SIP submittal that addresses the requirement that emissions from the City of Albuquerque/Bernalillo County sources not interfere with measures required in the SIP of any other state to protect visibility. *See* CAA section 110(a)(2)(D)(i)(II).

# III. What are the Requirements for RH SIPs Submitted under 40 CFR 51.309?

The following is a summary and basic explanation of the regulations covered under the RHR.

See 40 CFR 51.309 for a complete listing of the regulations under which this SIP was evaluated.

# A. The CAA and the Regional Haze Rule

RH SIPs must assure reasonable progress towards the national goal of achieving natural visibility conditions in Class I areas. Section 169A of the CAA and our implementing regulations require states to establish long-term strategies for making reasonable progress toward meeting this goal. Implementation plans must also give specific attention to certain stationary sources that were in existence on August 7, 1977, but were not in operation before August 7, 1962, and require these sources, where appropriate, to install BART controls for the purpose of eliminating or reducing visibility impairment. The

specific RH SIP requirements are discussed in further detail below.

# B. Projection of Visibility Improvement

For each of the 16 Class I areas located on the Colorado Plateau, the RH 309 SIP must include a projection of the improvement in visibility expressed in deciviews. 40 CFR 51.309(d)(2). The plan needs to show the projected visibility improvement for the best and worst 20 percent days through the year 2018, based on the application of all section 309 control strategies.

#### C. Clean Air Corridors

Pursuant to 40 CFR 51.309(d)(3), the RH 309 SIP must identify Clean Air Corridors (CACs). CACs are geographic areas located within transport region states that contribute to the best visibility days (least impaired) in the 16 Class I areas of the Colorado Plateau. (A map of the CAC can be found in section B.1 of the BC RH SIP.) The CAC as described in the 1996 GCVTC report covers nearly all of Nevada, large portions of Oregon, Idaho, and Utah, and encompasses several Indian nations. In order to meet the RHR requirements for CACs, states must adopt a comprehensive emissions tracking program for all visibility impairing pollutants within the CAC. Based on the emissions tracking, states must identify overall emissions growth or specific areas of emissions growth in and outside of the CAC that could be significant enough to result in visibility impairment at one or more of the 16 Class I areas. If

there is visibility impairment in the CAC, states must conduct an analysis of the potential impact in the 16 Class I areas and determine if additional emission control measures are needed and how these measures would be implemented. States must also indicate in their SIP if any other CACs exist, and if others are found, provide necessary measures to protect against future degradation of visibility in the 16 Class I areas.

## **D.** Stationary Source Reductions

# 1. SO<sub>2</sub> Emission Reductions

Section 169A of the CAA directs states to evaluate the use of retrofit controls at certain larger, often uncontrolled, older stationary sources in order to address their visibility impacts. Specifically, section 169A(b)(2)(A) of the CAA requires states to revise their SIPs to contain such measures as may be necessary to make reasonable progress towards the natural visibility goal, including a requirement that certain categories of existing major stationary sources built between 1962 and 1977 procure, install, and operate the "Best Available Retrofit Technology" (BART) as determined by the state. Under the RHR, states are directed to conduct BART determinations for such "BART-eligible" sources that may be anticipated to cause or contribute to any visibility impairment in a Class I area. Rather than requiring source-specific BART controls, states also have the flexibility to adopt an emissions trading program

<sup>&</sup>lt;sup>7</sup>The set of "major stationary sources" potentially subject to BART is listed in CAA section 169A(g)(7).

or other alternative program as long as the alternative provides greater reasonable progress towards improving visibility than BART.

Section 309 provides an alternative method of satisfying the section 308 SO<sub>2</sub> BART requirements with emission milestones and a backstop trading program (40 CFR 51.309(d)(4)). Under this approach, a RH 309 SIP must establish declining SO<sub>2</sub> emission milestones for each year of the program through 2018. The milestones must be consistent with the GCTVC's goal of 50 to 70 percent reduction in SO<sub>2</sub> emissions by 2040. If the milestones are exceeded in any year, the backstop trading program is triggered.

Pursuant to 40 CFR 51.309(d)(4)(ii)-(iv), states must include requirements in the SIP that allow states to determine whether the milestone has been exceeded. These requirements include documentation of the baseline emission calculation, monitoring, recordkeeping, and reporting (MRR) of SO<sub>2</sub> emissions, and provisions for conducting an annual evaluation to determine whether the milestone has been exceeded. 40 CFR 309(d)(4)(v) also contains requirements for implementing the backstop trading program in the event that the milestone is exceeded and the program is triggered.

The WRAP, in conjunction with the EPA, developed a model for a backstop trading program. In order to ensure consistency between states, states opting to participate in the 309 program need to adopt rules that are substantively equivalent to the model rules for the backstop trading program to meet the requirements of 40 CFR

51.309(d)(4). The trading program must also be implemented no later than 15 months after the end of the first year that the milestone is exceeded, require that sources hold allowances to cover their emissions, and provide a framework, including financial penalties, to ensure that the 2018 milestone is met.

# 2. Provisions for Stationary Source Emissions of Nitrogen Oxides (NOx) and Particulate Matter (PM)

Pursuant to 40 CFR 51.309(d)(4)(vii), a section 309 SIP must contain any necessary long term strategies and BART requirements for PM and NOx. Any such BART provisions may be submitted pursuant to 40 CFR 51.308(e). We promulgated regulations addressing RH in 1999, 64 FR 35714 (July 1, 1999), codified at 40 CFR part 51, subpart P.<sup>8</sup> These regulations require all states to submit implementation plans that, among other measures, contain either emission limits representing BART for certain sources constructed between 1962 and 1977, or alternative measures that provide for greater reasonable progress than BART. 40 CFR 51.308(e). The discussion below specifically applies to regional haze plans that opt to require BART on sources subject to the BART requirements, rather than satisfying the requirements for alternative measures that would be evaluated under 40 CFR 51.308(e)(2).

On July 6, 2005, the EPA published the Guidelines for BART Determinations Under

<sup>&</sup>lt;sup>8</sup> In *American Corn Growers Ass'n v. EPA*, 291 F.3d 1 (D.C. Cir. 2002), the U.S Court of Appeals for the District of Columbia Circuit issued a ruling vacating and remanding the BART provisions of the regional haze rule. In 2005, we issued BART guidelines to address the court's ruling in that case. *See* 70 FR 39104 (July 6, 2005).

the Regional Haze Rule at Appendix Y to 40 CFR Part 51 (hereinafter referred to as the "BART Guidelines") to assist states in determining which of their sources should be subject to the BART requirements and the appropriate emission limits for each applicable source. The BART Guidelines are not mandatory for all sources; in making a BART determination for a fossil fuel-fired electric generating plant (EGU) with a total generating capacity in excess of 750 megawatts, a state must use the approach set forth in the BART Guidelines. A state is encouraged, but not required, to follow the BART Guidelines in making BART determinations for other types of sources.

The process of establishing BART emission limitations can be logically broken down into three steps: first, states identify those sources which meet the definition of "BART-eligible source" set forth in 40 CFR 51.3019; second, states determine whether such sources "emits any air pollutant which may reasonably be anticipated to cause or contribute to any impairment of visibility in any such area" (a source which fits this description is "subject to BART,") and; third, for each source subject to BART, states then identify the appropriate type and the level of control for reducing emissions.

Under the BART Guidelines, states may select an exemption threshold value for their BART modeling, below which a BART-eligible source would not be expected to

<sup>&</sup>lt;sup>9</sup> BART-eligible sources are those sources that have the potential to emit 250 tons or more of a visibility-impairing air pollutant, were put in place between August 7, 1962 and August 7, 1977, and whose operations fall within one or more of 26 specifically listed source categories.

cause or contribute to visibility impairment in any Class I area. The state must document this exemption threshold value in the SIP and state the basis for its selection of that value. Any source with emissions that model above the threshold value would be subject to a BART determination review, or would become what is termed a "subject-to-BART" source. The BART Guidelines acknowledge varying circumstances affecting different Class I areas. States should consider the number of emission sources affecting the Class I areas at issue and the magnitude of the individual sources' impacts. Any exemption threshold set by the state should not be higher than 0.5 deciview. See also 40 CFR part 51, Appendix Y, section III.A.1.

In their SIPs, states must identify subject to BART sources and document their BART control determination analyses. The term "subject to BART source" used in the BART Guidelines means the collection of individual emission units at a facility that together comprises the subject-to-BART source. In making BART determinations, section 169A(g)(2) of the CAA requires that states consider the following factors: (1) the costs of compliance; (2) the energy and non-air quality environmental impacts of compliance; (3) any existing pollution control technology in use at the source; (4) the remaining useful life of the source; and (5) the degree of improvement in visibility which may reasonably be anticipated to result from the use of such technology. States are free to determine the weight and significance to be assigned to each factor.

A regional haze SIP must include source-specific BART emission limits and compliance schedules for each source subject to BART. Once a state has made its

BART determination, the BART controls must be installed and in operation as expeditiously as practicable, but no later than five years after the date of the EPA approval of the regional haze SIP. CAA section 169(g)(4)); 40 CFR 51.308(e)(1)(iv). In addition to what is required by the RHR, general SIP requirements mandate that the SIP must also include all regulatory requirements related to monitoring, recordkeeping, and reporting for the BART controls on the source. *See* CAA section 110(a).

#### E. Mobile Sources

Under 40 CFR 51.309(d)(5), the RH 309 SIP must provide inventories of on-road and non-road mobile source emissions of VOCs, NOx, SO<sub>2</sub>, PM<sub>2.5</sub>, elemental carbon, and organic carbon for the years 2003, 2008, 2013, and 2018. The inventories must show a continuous decline in total mobile source emissions of each of the above pollutants. If the inventories show a continuous decline in total mobile source emissions of each of these pollutants over the period 2003-2018, a state is not required to take further action in their SIP. If the inventories do not show a continuous decline in mobile source emissions of one or more of these pollutants over the period 2003-2018, a state must submit a SIP that contains measures that will achieve a continuous decline.

The RH 309 SIP must also contain any long-term strategies necessary to reduce emissions of SO<sub>2</sub> from non-road mobile sources, consistent with the goal of reasonable progress. In assessing the need for such long-term strategies, the state may

consider emissions reductions achieved or anticipated from any new federal standards for sulfur in non-road diesel fuel. Section 309 SIPs must provide an update on any additional mobile source strategies implemented within the state related to the GCVTC 1996 recommendations on mobile sources.

# F. Programs Related to Fire

For states submitting a section 309 SIP, the RHR contains requirements for programs related to fire (40 CFR 51.309(d)(6)). The plan must show that the state's smoke management program and all federal or private programs for prescribed fire in the state have a mechanism in place for evaluating and addressing the degree of visibility impairment from smoke in their planning and application of burning. The plan must also ensure that its prescribed fire smoke management programs have at least the following seven elements: 1) actions to minimize emissions, 2) evaluation of smoke dispersion, 3) alternatives to fire, 4) public notification, 5) air quality monitoring, 6) surveillance and enforcement, and 7) program evaluation (40 CFR 51.309(d)(6)(i)). The plan must be able to track statewide emissions of VOC, NOx, EC, OC, and fine particulate emissions from prescribed burning within the state.

Other requirements states must meet in their 309 plan related to fire include the adoption of a statewide process for gathering post-burn activity information to support emissions inventory and tracking systems. The plan must identify existing administrative barriers to the use of non-burning alternatives and adopt a process for

continuing to identify and remove administrative barriers where feasible. The SIP must include an enhanced smoke management program that considers visibility effects in addition to health objectives and is based on the criteria of efficiency, economics, law, emission reduction opportunities, land management objectives, and reduction of visibility impairment. Finally, the plan must establish annual emission goals to minimize emission increases from fire.

## G. Paved and Unpaved Road Dust

Section 309 requires states to submit a SIP that assesses the impact of dust emissions on regional haze in the 16 Class I areas on the Colorado Plateau and to include a projection of visibility conditions through 2018 for the least and most impaired days (40 CFR 51.309(d)(7)). If dust emissions are determined to be a significant contributor to visibility impairment, the plan must include emissions management strategies to address their impact.

#### **H. Pollution Prevention**

The requirements under pollution prevention only require the RH 309 SIP to provide an assessment of the energy programs as outlined in 40 CFR 51.309(d)(8) and does not require a state to adopt any specific energy-related strategies or regulations for regional haze. In order to meet the requirements related to pollution prevention, the state's plan must include an initial summary of all pollution prevention programs currently in place,

an inventory of all renewable energy generation capacity and production in use or planned as of the year 2002, the total energy generation capacity and production for the state, and the percent of the total that is renewable energy.

The state's plan must include a discussion of programs that provide incentives for efforts that go beyond compliance and/or achieve early compliance with air-pollution related requirements and programs to preserve and expand energy conservation efforts. The state must identify specific areas where renewable energy has the potential to supply power where it is now lacking and where renewable energy is most cost-effective. The RH 309 plan must include projections of the short- and long-term emissions reductions, visibility improvements, cost savings, and secondary benefits associated with the renewable energy goals, energy efficiency, and pollution prevention activities. The plan must also provide its anticipated contribution toward the GCVTC renewable energy goals for 2005 and 2015. The GCVTC goals are that renewable energy will comprise 10 percent of the regional power needs by 2005 and 20 percent by 2015.

#### I. Additional Recommendations

Section 309 requires states to determine if any of the other recommendations in the 1996 GCVTC report not codified by the EPA as part of section 309 should be implemented in their RH SIP (40 CFR 51.309(d)(9)). The states are not required in their RH 309 SIPs to adopt any control measures unless the state determines they are appropriate and can be practicably included as enforceable measures to remedy regional haze in the 16 Class I

areas. Any measures adopted would need to be enforceable like the other 309 required measures. States must also submit a report to the EPA and the public in 2013 and 2018, showing there has been an evaluation of the additional recommendations and the progress toward developing and implementing any such recommendations.

# J. Periodic Implementation Plan Revisions

The RHR requires states to submit progress reports in the form of SIP revisions in 2013 and 2018 (40 CFR 51.309(d)(10)). The SIP revisions must comply with the procedural requirements of 40 CFR 51.102 for public hearings and 40 CFR 51.103 for submission of plans. The assessment in the progress report must include an evaluation of Class I areas located within the state and Class I areas outside the state that are affected by emissions from the state. The EPA views these SIP revisions as a periodic check on progress, rather than a thorough revision of regional strategies. The state should focus on significant shortcomings of the original SIP from sources that were not fully accounted for or anticipated when the SIP was initially developed. The specifics of what each progress report must contain can be found at 40 CFR 51.509(d)(10)(i)(A)-(G).

At the same time that the state submits its progress reports to the EPA, it must also take an action based on the outcome of this assessment. If the assessment shows that the SIP requires no substantive revision, the state must submit to the EPA a "negative declaration" statement saying that no further SIP revisions are necessary at this time. If the assessment shows that the SIP is or may be inadequate due to emissions from outside

the state, the state must notify the EPA and other regional planning states and work with them to develop additional strategies. If the assessment shows that the SIP is or may be inadequate due to emissions from another country, the state must include appropriate notification to the EPA in its SIP revision. In the event the assessment shows that the SIP is or may be inadequate due to emissions from within the state, the state shall develop additional strategies to address the deficiencies and revise the SIP within one year from the due date of the progress report.

#### **K.** Interstate Coordination

In complying with the requirements of 40 CFR 51.309(d)(11), states may include emission reductions strategies that are based on coordinated implementation with other states. The SIP must include documentation of the technical and policy basis for the individual state apportionment (or the procedures for apportionment throughout the transboundary region), the contribution addressed by the state's plan, how it coordinates with other state plans, and compliance with any other appropriate implementation plan approvability criteria. States may rely on the relevant technical, policy, and other analyses developed by a regional entity, such as the WRAP in providing such documentation.

#### L. Additional Class I Areas

To comply with the requirements of 40 CFR 51.309(g), RH 309 SIPs must demonstrate

reasonable progress for mandatory Class I Federal areas other than the 16 Class I areas covered by the GCVTC. States must submit an implementation plan that demonstrates the expected visibility conditions for the most and least impaired days at the additional Class I areas based on emission projections from the long-term strategies in the implementation plan. The implementation plan must contain provisions establishing reasonable progress goals and additional measures necessary to demonstrate reasonable progress for the additional Federal Class I areas. The RH 309 SIP must address regional haze in each additional Class I area located within the State and in each additional Class I area located outside the State which may be affected by emissions from within the State. 40 CFR 309(g) requires that these provisions comply with 40 CFR 51.308(d)(1) through (4), the general requirements of which are described below.

#### 1. Determination of Reasonable Progress Goals

Pursuant to 40 CFR 51.308(d)(1), for each mandatory Class I area located within the State, the regional haze SIPs must establish goals (expressed in deciviews, dv) that provide for reasonable progress towards achieving natural visibility conditions. The vehicle for ensuring continuing progress towards achieving the natural visibility goal is the submission of a series of RH SIPs from the states that establish two reasonable progress goals (RPGs) (i.e., two distinct goals, one for the "best" and one for the "worst" days) for every Class I area for each (approximately) 10-year implementation period. *See* 70 FR 3915; *see also* 64 FR 35714. The RHR does not mandate specific milestones or rates of progress, but

instead calls for states to establish goals that provide for "reasonable progress" toward achieving natural (i.e., "background") visibility conditions. In setting RPGs, states must provide for an improvement in visibility for the most impaired days over the (approximately) 10-year period of the SIP, and ensure no degradation in visibility for the least impaired days over the same period. *Id*.

States have significant discretion in establishing RPGs, but are required to consider the following factors established in section 169A of the CAA and in our RHR at 40 CFR 51.308(d)(1)(i)(A): (1) the costs of compliance; (2) the time necessary for compliance; (3) the energy and non-air quality environmental impacts of compliance; and (4) the remaining useful life of any potentially affected sources. States must demonstrate in their SIPs how these factors are considered when selecting the RPGs for the best and worst days for each applicable Class I area. States have considerable flexibility in how they take these factors into consideration, as noted in our Reasonable Progress Guidance. <sup>10</sup> In setting the RPGs, states must also consider the rate of progress needed to reach natural visibility conditions by 2064 (referred to hereafter as the "Uniform Rate of Progress (URP)" and the emission reduction measures needed to achieve that rate of progress over the 10-year period of the SIP. Uniform progress towards achievement of natural conditions by the year 2064 represents a rate of progress, which states are to use for analytical comparison to the amount of progress they

Guidance for Setting Reasonable Progress Goals under the Regional Haze Program, June 1, 2007, memorandum from William L. Wehrum, Acting Assistant Administrator for Air and Radiation, to EPA Regional Administrators, EPA Regions 1-10 (pp.4-2, 5-1).

expect to achieve. If the State establishes a RPG that provides for a slower rate of improvement in visibility than the URP, the State must demonstrate that the URP is not reasonable based on the factors above and that the RPG is reasonable. Regional haze SIPs must provide an assessment of the number of years it would take to attain natural visibility at the rate of progress selected by the State as reasonable. In setting RPGs, each state with one or more Class I areas ("Class I State") must also consult with potentially "contributing states," i.e., other nearby states with emission sources that may be affecting visibility impairment at the Class I State's areas. 40 CFR 51.308(d)(1)(iv).

#### 2. Determination of Baseline, Natural, and Current Visibility Conditions

The RHR establishes the deciview (dv) as the principal metric for measuring visibility. *See* 70 FR 39104. This visibility metric expresses uniform changes in the degree of haze in terms of common increments across the entire range of visibility conditions, from pristine to extremely hazy conditions. Visibility is sometimes expressed in terms of the visual range, which is the greatest distance, in kilometers or miles, at which a dark object can just be distinguished against the sky. The deciview is a useful measure for tracking progress in improving visibility, because each deciview change is an equal incremental change in visibility perceived by the human eye. Most people can detect a change in

visibility of one deciview.<sup>11</sup>

The deciview is used in expressing Reasonable Progress Goals (RPGs) (which are interim visibility goals towards meeting the national visibility goal), defining baseline, current, and natural conditions, and tracking changes in visibility. To track changes in visibility over time at each of the 156 Class I areas covered by the visibility program (40 CFR 81.401-437), and as part of the process for determining reasonable progress, states must calculate the degree of existing visibility impairment at each Class I area at the time of each RH SIP submittal and periodically review progress every five years midway through each 10-year implementation period. To do this, section 51.308(d)(2) of the RHR requires states to determine the degree of impairment (in deciviews) for the average of the 20 percent least impaired ("best") and 20 percent most impaired ("worst") visibility days over a specified time period at each of their Class I areas. In addition, states must also develop an estimate of natural visibility conditions for the purpose of comparing progress toward the national goal. Natural visibility is determined by estimating the natural concentrations of pollutants that cause visibility impairment and then calculating total light extinction based on those estimates. We have provided guidance to states regarding how to calculate baseline, natural and current visibility conditions. 12

The preamble to the RHR provides additional details about the deciview. 64 FR 35714, 35725 (July 1, 1999).

Cruidance for Estinating Natural Visibility Conditions Under the Regional Haze Rule. September 2003. FPA.

Guidance for Estimating Natural Visibility Conditions Under the Regional Haze Rule, September 2003, EPA-454/B-03-005, available at http://www.epa.gov/ttncaaa1/t1/memoranda/rh\_envcurhr\_gd.pdf, (hereinafter referred to as "our 2003 Natural Visibility Guidance"); and Guidance for Tracking Progress Under the Regional Haze Rule, (EPA-454/B-03-004, September 2003, available at

For the first RH SIPs that were due by December 17, 2007, "baseline visibility conditions" were the starting points for assessing "current" visibility impairment. Baseline visibility conditions represent the degree of visibility impairment for the 20 percent least impaired days and 20 percent most impaired days for each calendar year from 2000 to 2004. Using monitoring data for 2000 through 2004, states are required to calculate the average degree of visibility impairment for each Class I area, based on the average of annual values over the five-year period. The comparison of initial baseline visibility conditions to natural visibility conditions indicates the amount of improvement necessary to attain natural visibility, while the future comparison of baseline conditions to the then current conditions will indicate the amount of progress made. In general, the 2000 - 2004 baseline period is considered the time from which improvement in visibility is measured.

# 3. Long-Term Strategy (LTS)

Consistent with the requirement in section 169A(b) of the CAA that states include in their regional haze SIP a 10 to 15 year strategy for making reasonable progress, Section 51.308(d)(3) of the RHR requires that states include a LTS in their RH SIPs. The LTS is the compilation of all control measures a state will use during

the implementation period of the specific SIP submittal to meet any applicable RPGs. The LTS must include "enforceable emissions limitations, compliance schedules, and other measures as necessary to achieve the reasonable progress goals" for all Class I areas within, or affected by emissions from, the state. 40 CFR 51.308(d)(3).

When a state's emissions are reasonably anticipated to cause or contribute to visibility impairment in a Class I area located in another state, the RHR requires the impacted state to coordinate with the contributing states in order to develop coordinated emissions management strategies. 40 CFR 51.308(d)(3)(i). Also, a state with a Class I area impacted by emissions from another state must consult with such contributing state, (id.) and must also demonstrate that it has included in its SIP all measures necessary to obtain its share of emission reductions needed to meet the reasonable progress goals for the Class I area. *Id.* at (d)(3)(ii). In such cases, the contributing state must demonstrate that it has included, in its SIP, all measures necessary to obtain its share of the emission reductions needed to meet the RPGs for the Class I area. The RPOs have provided forums for significant interstate consultation, but additional consultations between states may be required to sufficiently address interstate visibility issues. This is especially true where two states belong to different RPOs.

States should consider all types of anthropogenic sources of visibility impairment in developing their LTS, including stationary, minor, mobile, and area sources. At

a minimum, states must describe how each of the following seven factors listed below are taken into account in developing their LTS: (1) emission reductions due to ongoing air pollution control programs, including measures to address RAVI; (2) measures to mitigate the impacts of construction activities; (3) emissions limitations and schedules for compliance to achieve the RPG; (4) source retirement and replacement schedules; (5) smoke management techniques for agricultural and forestry management purposes including plans as currently exist within the state for these purposes; (6) enforceability of emissions limitations and control measures; (7) the anticipated net effect on visibility due to projected changes in point, area, and mobile source emissions over the period addressed by the LTS. 40 CFR 51.308(d)(3)(v). Pursuant to 40 CFR 51.309(g)(2)(i), the State may build upon and take credit for the strategies implemented to meet the requirements under paragraph (d) of 40 CFR 51.309.

## 4. Monitoring Strategy and Other SIP Requirements

Section 51.308(d)(4) of the RHR includes the requirement for a monitoring strategy for measuring, characterizing, and reporting of RH visibility impairment that is representative of all mandatory Class I Federal areas within the state. The strategy must be coordinated with the monitoring strategy required in section 51.305 for RAVI. Compliance with this requirement may be met through "participation" in the Interagency Monitoring of Protected Visual Environments (IMPROVE) network, i.e., review and use of monitoring data from the network.

The monitoring strategy is due with the first RH SIP, and it must be reviewed every five (5) years. The monitoring strategy must also provide for additional monitoring sites if the IMPROVE network is not sufficient to determine whether RPGs will be met.

The SIP must also provide for the following:

- Procedures for using monitoring data and other information in a state with mandatory Class I areas to determine the contribution of emissions from within the state to RH visibility impairment at Class I areas both within and outside the state;
- Procedures for using monitoring data and other information in a state with no mandatory Class I areas to determine the contribution of emissions from within the state to RH visibility impairment at Class I areas in other states;
- Reporting of all visibility monitoring data to the Administrator at least annually for each Class I area in the state, and where possible, in electronic format;
- Developing a statewide inventory of emissions of pollutants that are
  reasonably anticipated to cause or contribute to visibility impairment in any
  Class I area. The inventory must include emissions for a baseline year,
  emissions for the most recent year for which data are available, and estimates
  of future projected emissions. A state must also make a commitment to update
  the inventory periodically; and

 Other elements, including reporting, recordkeeping, and other measures necessary to assess and report on visibility.

The RHR requires control strategies to cover an initial implementation period extending to the year 2018, with a comprehensive reassessment and revision of those strategies, as appropriate, every 10 years thereafter. Periodic SIP revisions must meet the core requirements of section 51.308(d) with the exception of BART. The requirement to evaluate sources for BART applies only to the first RH SIP. Facilities subject to BART must continue to comply with the BART provisions of section 51.308(e), as noted above. Periodic SIP revisions will assure that the statutory requirement of reasonable progress will continue to be met.

# IV. What are the Additional Requirements for Alternative Programs under the RHR?

States opting to submit an alternative program, such as the backstop trading program under section 309, must also meet requirements under 40 CFR 51.308(e)(2) and (e)(3). These requirements for alternative programs relate to the "Better-than-BART" test and fundamental elements of any alternative program that establishes a cap on emissions.

#### A. "Better-than-BART" Demonstration

In order to demonstrate that the alternative program achieves greater reasonable progress than source-specific BART, states must provide a demonstration in their SIP that meets

the requirements in 40 CFR 51.308(e)(2)(i)-(v). States submitting section 309 SIPs or other alternative programs are required to list all BART-eligible sources and categories covered by the alternative program. States are then required to determine which BART-eligible sources are "subject to BART." The SIP must provide an analysis of the best system of continuous emission control technology available and the associated reductions for each source subject to BART covered by the alternative program, or what is termed a "BART benchmark." Where the alternative program, such as the 309 backstop trading program, has been designed to meet requirements other than BART, states may use simplifying assumptions in establishing a BART benchmark. These assumptions can provide the baseline to show that the alternative program achieves greater reasonable progress than BART (71 FR 60619). Under this approach, states should use the presumptive limits for EGUs in the BART Guidelines to establish the BART benchmark used in the comparison, unless the state determines that such presumptions are not appropriate for particular EGUs (70 FR 60619).

The RH SIP, and any RH 309 SIP that establishes a 309 backstop trading program, must provide an analysis of the projected emissions reductions achievable through the trading program or other alternative measure and a determination that the trading program or other alternative measure achieves greater reasonable progress than would be achieved through the installation and operation of BART (40 CFR 308(e)(2)(C)(iii)). Section 308(e)(2) requires that all emission reductions for the alternative program take place by 2018, as well as that the emission reductions resulting from the alternative program are surplus to those reductions resulting from measures adopted to meet requirements of the CAA as of the baseline date of the SIP. Pursuant to 40 CFR 51.309(e)(2)(E)(v), states

have the option of including a provision that the emissions trading program or other alternative measure may include a geographic enhancement to the program to address the requirement under 40 CFR 51.302(c) related to BART, for reasonably attributable visibility impairment from the pollutants covered under the emissions trading program or other alternative measure.

States must also address the distribution of emissions under the BART alternative as part of the "better-than-BART" demonstration (40 CFR 51.308(e)(3)). If a state can show that with the alternative program the distribution of emissions is not substantially different than under BART and the alternative program results in greater emission reductions, then the alternative measure may be deemed to achieve greater reasonable progress. If the distribution of emissions is significantly different, the state must conduct dispersion modeling to determine differences in visibility between BART and the alternative program for each impacted Class I area for the worst and best 20 percent of days. The modeling must show that visibility does not decline at any Class I area and that visibility overall is greater than what would be achieved with BART.

## B. Elements Required for All Alternative Programs that have a Emissions Cap

Under 40 CFR 51.308(e)(2)(vi)(A) - (L), the EPA established fundamental requirements for trading or alternative programs that have an emissions cap and require sources to hold allowances that they can sell, buy, or trade, as in the section 309 backstop trading program. These requirements are discussed in detail below.

## 1. Applicability

The alternative program must have applicability provisions that define the sources subject to the program. In the case of a program covering sources in multiple states, the states must demonstrate that the applicability provisions in each state cover essentially the same size facilities and, if source categories are specified, cover the same source categories.

#### 2. Allowances

Allowances are a key feature of a cap and trade program. An allowance is a limited authorization for a source to emit a specified amount of a pollutant, as defined by the specific trading program, during a specified period. Allowances are fully marketable commodities. Once allocated, allowances may be bought, sold, traded, or banked for use in future years. The EPA has not included in the rule detailed requirements on how states and tribes can allocate allowances. A state or tribe can determine how to allocate allowances as long as the allocation of the tonnage value of allowances does not exceed the total number of tons of emissions capped by the budget. The trading program must include allowance provisions ensuring that the total value of allowances issued each year under the program will not exceed the emissions cap on total annual emissions from the sources in the program.

# 3. Monitoring, Recordkeeping, and Reporting

Monitoring, recordkeeping, and reporting (MRR) of a source's emissions are integral parts of any cap and trade program. Consistent and accurate measurement of emissions ensures fungibility of allowances by validating that each allowance actually represents its specified tonnage value of emissions and that one ton of reported emissions from one source is equivalent to one ton of reported emissions at another source. The MRR provisions must require that boilers, combustion turbines, and cement kilns in the alternative program that are allowed to sell or transfer allowances comply with the requirements of 40 CFR part 75. The MRR provisions must require that other sources in the program allowed to sell or transfer allowances provide emissions information with the same precision, reliability, accessibility, and timeliness as information required by 40 CFR part 75.

#### 4. Tracking System

An accurate and efficient tracking system is critical to the functioning of an emissions trading market. The tracking system must also be transparent, allowing all interested parties access to the information contained in the accounting system. Thus, alternative programs must have requirements for a tracking system that is publicly available in a secure, centralized database to track in a consistent manner

all allowances and emissions in the program.

#### 5. Account Representative

Each source owner or operator covered by the alternative program must designate an individual account representative who is authorized to represent the owner or operator in all matters pertaining to the trading program and who is responsible for the data reported for that source. The account representative will be responsible for, among other things, permitting, compliance, and allowance related actions.

#### 6. Allowance Transfer

SIPs must contain provisions detailing a uniform process for transferring allowances among all sources covered by the program and other possible participants. The provisions must provide procedures for sources to request an allowance transfer, for the request and transfer to be recorded in the allowance tracking system, for notification to the source that the transfer has occurred, and for notification to the public of each transfer and request.

#### 7. Compliance Provisions

Cap and trade programs must include compliance provisions that prohibit a source

from emitting more emissions than the total tonnage value of allowances the source holds for that year. A cap and trade program must also contain the specific methods and procedures for determining compliance on an annual basis.

#### 8. Penalty Provisions

In order to provide sources with a strong incentive to comply with the requirement to hold sufficient allowances for their emissions on an annual basis and to establish an immediate minimum economic consequence for non-compliance, the program must include a system for mandatory allowance deductions. SIPs must contain a provision that if a source has excess emissions in a given year, allowances allocated for the subsequent year will be deducted from the source's account in an amount at least equal to three times the excess emissions.

## 9. Banking of Allowances

The banking of allowances occurs when allowances that have not been used for compliance are set aside for use in a later compliance period. Alternative programs can include provisions for banked allowances, so long as the SIP clearly identifies how unused allowances may be used in future years and whether there are any restrictions on the use of any such banked allowances.

#### 10. Program Assessment

The alternative program must include provisions for periodic assessment of the program. Such periodic assessments are a way to retrospectively assess the performance of the trading program in meeting the goals of the regional haze program and determining whether the trading program needs any adjustments or changes. At a minimum, the program evaluation must be conducted every five years to coincide with the periodic report describing progress towards the reasonable progress goals required under 40 CFR 51.308(g) and must be submitted to the EPA.

#### V. Our Analysis of the City of Albuquerque/Bernalillo County Submittal

The following summarizes the reasons why we are proposing that the AQCB's July 28, 2011 submittal (with the submitted companion rules of 20.11.46 NMAC and 20.11.21 NMAC) meets the requirements of 40 CFR 51.309 and the Clean Air Act.

# A. Projection of Visibility Improvement

Pursuant to 40 CFR 51.309(d)(2), the BC RH 309 SIP provides a comparison of the monitored 2000-2004 baseline visibility conditions in deciviews (dv) for the 20 percent best and 20 percent worst days to the projected visibility improvement for 2018 for the Class I areas on the Colorado Plateau. Table 1 shows the baseline monitoring data and projected visibility improvement for 2018 from the WRAP photochemical modeling (for

details on the WRAP emission inventories and photochemical modeling refer to the WRAP Technical Support Document<sup>13</sup> and our review of the technical products developed by the WRAP for the States in the western region, in support of their RH SIPs<sup>14</sup>). The projected visibility improvement for the 2018 Base Case (referred to as the Base18b emission inventory and modeled projections) reflects growth plus all controls "on the books" as of December 2004. The projected visibility improvement for the Preliminary Reasonable Progress Case (referred to as the PRP18b emission inventory and modeled projections) reflects refined growth estimates, all controls "on the books" as of 2007, and includes presumptive or known SO<sub>2</sub> BART controls. The modeling results show projected visibility improvement for the 20 percent worst days in 2018 and no degradation in visibility conditions on the 20 percent best days at all 16 Class I areas on the Colorado Plateau. We are proposing to determine the RH 309 SIP submittal satisfies the requirements of 40 CFR 51.309(d)(2).

<sup>&</sup>lt;sup>13</sup> WRAP Regional Technical Support Document for the Requirements of §309 of the Regional Haze Rule (64 Federal Register 35714 – July 1, 1999) revised May 7, 2008.

<sup>&</sup>lt;sup>14</sup> Our review of the technical products developed by the WRAP is available as Technical Support Document for Technical Products Prepared by the Western Regional Air Partnership (WRAP) in Support of Western Regional Haze Plans, February 28, 2011

Table 1 – Baseline and 2018 Visibility at the Colorado Plateau Class I Areas

		20 percent Worst Visibility Days			20 percent Best Visibility Days		
Class I Area	State	2000-2004 Baseline Monitoring Data (dv)	2018 Base Case (dv)	2018 Preliminary Reasonable Progress Case (dv)	2000-2004 Baseline Monitoring Data (dv)	2018 Base Case (dv)	2018 Preliminary Reasonable Progress Case (dv)
Grand Canyon National Park	AZ	11.7	11.4	11.3	2.2	2.2	2.1
Mount Baldy Wilderness	AZ	11.9	11.5	11.4	3.0	2.9	2.8
Petrified Forest National Park	AZ	13.2	12.9	12.9	5.0	4.9	4.8
Sycamore Canyon Wilderness	AZ	15.3	15.1	15.1	5.6	5.6	5.6
Black Canyon of the Gunnison National Park Wilderness	СО	10.3	10.1	9.9	3.1	2.9	2.9
Flat Tops Wilderness	CO	9.6	9.2	9.0	0.7	0.6	0.5
Maroon Bells Wilderness	СО	9.6	9.2	9.0	0.7	0.6	0.5
Mesa Verde National Park	СО	13.0	12.8	12.6	4.3	4.1	4.0
Weminuche Wilderness	СО	10.3	10.1	9.9	3.1	2.9	2.9
West Elk Wilderness	CO	9.6	9.2	9.0	0.7	0.6	0.5
San Pedro Parks Wilderness	NM	10.2	10.0	9.8	1.5	1.3	1.2
Arches National Park	UT	11.2	11.0	10.9	3.8	3.6	3.5
Bryce Canyon National Park	UT	11.6	11.3	11.2	2.8	2.7	2.6
Canyonlands National Park	UT	11.2	11.0	10.9	3.8	3.6	3.5
Capitol Reef National Park	UT	10.9	10.6	10.5	4.1	4.0	3.9
Zion National Park	UT	13.2	13.0	13.0	5.0	4.7	4.7

# **B.** Clean Air Corridors

# 1. Comprehensive emissions tracking program.

Pursuant to 40 CFR 51.309(d)(3), BC's RH SIP submittal provides for the implementation of strategies regarding clean-air corridors. We propose to find the

SIP's treatment of clean-air corridors satisfies the requirements of 40 CFR 309(d)(3), and its subsections, as discussed in the next several paragraphs.

The WRAP developed a comprehensive emissions tracking system to assist the states in tracking emissions within portions of Oregon, Idaho, Nevada and Utah that have been identified as part of the CAC. The emission tracking is to ensure that visibility does not degrade on the least-impaired days in any of the 16 Class I areas of the Colorado Plateau. For a complete description of the emission tracking system and the process by which the annual emission trends will be summarized in order to identify any significant emissions growth that could lead to visibility degradation in the 16 Class I areas, see *Analysis of the Clean Air Corridor (CAC)* in the Appendix B-SIP of the BC RH SIP. The SIP submittal and all appendices can be found in the docket for this notice. Since no portion of the CAC lies within New Mexico, this emissions tracking system does not include tracking of emissions from AQCB. We are proposing to determine the RH 309 SIP submittal has met the requirements of 40 CFR 51.309(d)(3).

#### 2. Identification of CACs

Pursuant to 40 CFR 51.309(d)(3)(i), BC has provided in its RH 309 SIP submittal the geographic boundaries of the CAC (a map of the CAC can be found as Figure 3 in Section B of the BC RH SIP). The WRAP identified the CAC using studies conducted by the Meteorological Subcommittee of the GCVTC and then updated

the CAC based on an assessment described in the *WRAP Policy on Clean Air Corridors* and related technical analysis conducted by the WRAP. Appendix B-SIP of the AQCB RH SIP summarizes this assessment and contains additional technical analysis associated with the identification of the CAC. We are proposing to determine the RH 309 SIP submittal satisfies the 51.309(d)(3)(i) requirement.

#### 3. Patterns of growth within and outside of the CAC

Pursuant to 40 CFR 51.309(d)(3)(ii)-(iii), BC in its RH 309 SIP submittal has determined, based on the *WRAP Policy Paper on Clean Air Corridors* and technical analysis conducted by the WRAP, <sup>15</sup> that inside and outside the CAC there is no significant emissions growth occurring at this time that is causing visibility impairment in the 16 Class I areas of the Colorado Plateau. The WRAP will summarize annual emission trends within and outside of the CAC and will assess whether any significant future emissions growth is occurring that could result in visibility impairment in any of the 16 Class I areas. We are proposing to determine that 40 CFR 51.309(d)(3)(ii)-(iii) is met.

# 4. Actions if impairment inside or outside the Clean Air Corridor occurs

The BC RH 309 SIP submittal describes how BC, in coordination with the State

<sup>&</sup>lt;sup>15</sup> WRAP Regional Technical Support Document for the Requirements of §309 of the Regional Haze Rule (64 Federal Register 35714 – July 1, 1999) revised May 7, 2008.

of New Mexico, other transport region states, and tribes, will review the annual summary of emission trends within the CAC and determine whether any significant emissions growth has occurred. If BC identifies significant emissions growth, it, in coordination with the State of New Mexico, other transport region states, and tribes, will seek WRAP assistance in conducting an analysis of the effects of this emissions growth. Pursuant to 40 CFR 51.309(d)(3)(iv), if this analysis finds that the emissions growth is causing visibility impairment in the 16 Class I areas, BC, in coordination with the State of New Mexico, other transport region states, and tribes, will evaluate the need for additional emission reduction measures and identify an implementation schedule for such measures. BC will report on the need for additional reduction measures to the EPA in accordance with the periodic progress reports required under 40 CFR 51.309(d)(10)(i). We are proposing to determine the RH 309 SIP submittal satisfies the strategy requirement of 40 CFR 309(d)(3)(iv).

#### 5. Other CACs

Pursuant to 40 CFR 51.309(d)(3)(v), BC in its RH 309 SIP submittal has concluded that one other CAC for the Grand Canyon National Park can be identified at this time. BC's conclusion appears to derive from the *WRAP*Regional Technical Support Document, which cites to an alternative analysis of

CACs for the Grand Canyon. This alternative analysis is not relied upon by the WRAP, however, to identify a CAC. The CAC identified by the WRAP pursuant to 40 CFR 51.309(d)(3)(i), is mostly a subset of the boundaries of the additional CAC for the Grand Canyon identified by BC (Appendix B-SIP, figure 26 and 27). The WRAP TSD notes that: "Other than the various options for selection of a clean air corridor for Grand Canyon National Park, shown above, no other corridors have been identified. If the growth of visibility-impairing emissions, in the corridor identified, remain protective of Grand Canyon National Park, then it should be protective of the other Colorado Plateau Class I areas. Localized emissions near the Class I areas within the Clean Air Corridor, however, may have more effect on those Class I areas. Similarly, disproportionate emissions growth in the southern portion of the corridor may have more effect on Grand Canyon National Park."

BC identified an additional CAC for the Grand Canyon National Park, but determined no additional measures are required at this time to protect against future degradation of air quality in any of the 16 Class I areas. The WRAP TSD and WRAP *Policy Paper on Clean Air Corridors* concluded that identification of the one CAC and evaluation of patterns of growth within and outside this CAC are sufficient to determine that no significant emissions growth is occurring at this time and that emission growth is not causing visibility impairment in the 16 Class

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<sup>&</sup>lt;sup>16</sup> Green, M. C.; Pitchford, M. L.; and Ashbaugh, L.L. Identification of Candidate Clean Air Corridors for the Colorado Plateau. *J. Air & Waste Manage. Assoc. 1996.* 46(5), 446.

I areas of the Colorado Plateau. We are proposing to approve BC's determination under 40 CFR 51.309(d)(3)(v).

# C. Stationary Source Reductions

# 1. Provisions for stationary source emissions of SO<sub>2</sub>

As required by 40 CFR 51.309(d)(4)(i), BC in its RH 309 SIP submittal sets forth milestone SO<sub>2</sub> numbers for each year of the program until 2018.<sup>17</sup> Table 2 shows the milestone numbers and how compliance with the annual milestones will be determined (Table 3 of the BC RH 309 SIP).

<sup>&</sup>lt;sup>17</sup> The milestone numbers reflect the participation of Wyoming, Utah, and New Mexico (including the City of Albuquerque-Bernalillo County) in the 309 backstop trading program.

**Table 2 – SO2 Emissions Milestones** 

Year	Regional sulfur dioxide milestone (tons per year (tpy)	Annual SO2 emissions used to Determine Compliance with the Annual Milestones
2008	269,083 tons SO <sub>2</sub>	Average of 2006, 2007 and 2008
2009	234,903 tons SO <sub>2</sub>	Average of 2007, 2008 and 2009
2010	200,722 tons SO <sub>2</sub>	Average of 2008, 2009 and 2010
2011	200,722 tons SO <sub>2</sub>	Average of 2009, 2010 and 2011
2012	200,722 tons SO <sub>2</sub>	Average of 2010, 2011 and 2012
2013	185,795 tons SO <sub>2</sub>	Average of 2011, 2012 and 2013
2014	170,868 tons SO <sub>2</sub>	Average of 2012, 2013 and 2014
2015	155,940 tons SO <sub>2</sub>	Average of 2013, 2014 and 2015
2016	155,940 tons SO <sub>2</sub>	Average of 2014, 2015 and 2016
2017	155,940 tons SO <sub>2</sub>	Average of 2015, 2016 and 2017
2018	141,849 tons SO <sub>2</sub>	Year 2018 only
2019 forward, until replaced by an approved SIP	141,849 tons SO <sub>2</sub>	Annual; no multiyear averaging

SO<sub>2</sub> emissions from sources in 1990 totaled 358,364 tpy and the 2018 milestone is 141,849 tpy (see *Demonstration that the SO<sub>2</sub> Milestones Provide Greater Reasonable Progress than BART*, Section N of the BC RH SIP). The difference is a 60 percent reduction in SO<sub>2</sub> emissions from 1990 to 2018. Thus, the AQCB has concluded that the emission reductions are on target to achieve the GCVTC goal of a 50 to 70 percent reduction of SO<sub>2</sub> emissions by 2040. We are proposing to determine the RH 309 submittal meets the requirements of 40 CFR 51.309(d)(4)(i).

#### 2. Documentation of emissions calculation methods for SO<sub>2</sub>

Pursuant to 40 CFR 51.309(d)(4)(ii), the SIP includes documentation of the specific methodology used to calculate SO<sub>2</sub> emissions during the 2006 base year for each emitting unit included in the program. This requirement is addressed in Section N of the SIP, while 20.11.46 NMAC provides details on the methodology.

Pursuant to 40 CFR 51.309(d)(4)(ii), AQCB will document any change to the specific methodology used to calculate emissions at any emitting unit for any year after the base year. Until the program has been triggered and source compliance is required, AQCB will submit an annual emissions report that documents prior year emissions for AQCB sources covered by the 309 program to all participating states by September 30 of each year. AQCB will adjust actual emission inventories for sources that change the method of monitoring or calculating their emissions to be comparable to the emission monitoring or calculation method used to calculate the 2006 base year inventory. The EPA is proposing to determine the SIP submittal satisfies the requirements of 40 CFR 309(d)(4)(ii).

#### 3. Monitoring, recordkeeping, and reporting of SO<sub>2</sub> emissions

In order to meet the emission reporting requirements of 40 CFR 51.309(d)(4)(iii), the RH 309 SIP submittal includes provisions requiring the monitoring, recordkeeping, and reporting of actual stationary source SO<sub>2</sub> emissions within the

City of Albuquerque/Bernalillo County to determine if the milestone has been exceeded. 20.11.46 NMAC, *Sulfur Dioxide Emissions Inventory Requirements; Western Backstop Sulfur Dioxide Trading Program*, requires sources to report their emissions annually. Specifically, 20.11.46.9 NMAC defines the emission inventory and reporting requirements for tracking compliance with the regional sulfur dioxide milestones until the western backstop sulfur dioxide trading program has been fully implemented and emission tracking has occurred under 20.11.46.16 NMAC (See section V.E.3 of this notice for a further detail on emission inventory requirements under 20.11.46.16 NMAC). We are proposing to approve 20.11.46 NMAC and determine that the 309 SIP submittal satisfies the requirements of 40 CFR 51.309(d)(4)(iii).

#### 4. Criteria and procedures for a market trading program

As stated above, until the backstop trading program has been triggered and source compliance is required, the BC RH 309 SIP submittal provides that BC shall submit an annual emissions report for sources within the City of Albuquerque/Bernalillo County to all participating states by September 30 of each year. The report shall document actual sulfur dioxide emissions during the previous calendar year for all sources subject to the Section 309 program. The WRAP will compile reports from all participating states into a draft regional emission report for SO<sub>2</sub> by December 31 of each year. This report will include actual regional sulfur dioxide emissions, adjustments to account for changes in

monitoring/calculation methods or enforcement/settlement agreements, and adjusted average emissions for the last three years for comparison to the regional milestone. As required by 40 CFR 51.309(d)(4)(iv), based on this compilation of reports from all states participating in the 309 program, states will determine if the milestone has been exceeded and will include a determination in a final regional emissions report that is submitted to the EPA. This final report and determination will be submitted to the EPA by the end of March, 15 months following the milestone year. We are proposing to determine the RH 309 SIP meets the requirements of 40 CFR 51.309(d)(4)(iv).

#### 5. Market Trading Program

Per 40 CFR 51.309(d)(4)(v), the RH 309 SIP submittal provides that if the 309 backstop trading program is triggered, the regional emissions report will contain a common trigger date. In the absence of a common trigger date, the default date will be March 31 of the applicable year, but no later than 15 months after the end of the milestone year where the milestone was exceeded. The BC RH 309 SIP submittal requires that sources comply, as soon as practicable, with the requirement to hold allowances covering their emissions. Because the backstop trading program does not allow allocations to exceed the milestone, the program is sufficient to achieve the milestones adopted pursuant to 40 CFR 51.309(d)(4)(i) as discussed above. The backstop trading program is also consistent with the elements for such programs outlined in 40 CFR 51.308(e)(2)(vi). The analysis

found in Section V.E. of this notice shows that the backstop trading program is consistent with the elements for trading programs outlined in 40 CFR 51.308(e)(2)(vi), as required by Section 309. See 40 CFR 51.309(d)(4)(v). We are proposing to determine the RH 309 SIP submittal meets the requirements of 40 CFR 309(d)(4)(v). We are also proposing to approve 20.11.46 NMAC, which includes the rules that govern the program. A review of 20.11.46 NMAC and revisions to the rule can be found in the TSD.

#### 6. Provisions for the 2018 Milestone

Pursuant to 40 CFR 51.309(d)(4)(vi)(A), the RH 309 SIP submittal has provisions to ensure that until a revised implementation plan is submitted in accordance with 40 CFR 51.308(f) and approved by the EPA, emissions from covered stationary sources in any year beginning in 2018 do not exceed the 2018 milestone. In order to meet this requirement, BC has included special provisions for what will be required as part of their 2013 SIP revision required under 40 CFR 51.309(d)(10). The RH 309 SIP submittal provides that the 2013 SIP revision required by 40 CFR 51.309(d)(10) will contain either the provisions of a program designed to achieve reasonable progress for stationary sources of SO<sub>2</sub> beyond 2018 or a commitment to submit a SIP revision containing the provisions of such a program no later than December 31, 2016. (Section C, Part D of the BC RH SIP). We are proposing to determine the RH 309 SIP submittal satisfies the requirements of 40 CFR 51.309(d)(4)(vi)(A).

#### 7. Special Penalty Provision for 2018

Pursuant to 40 CFR 51.309(d)(4)(vi)(B), the BC RH SIP submittal includes special penalty provisions to ensure that the 2018 milestone is met. If the backstop trading is triggered and the program will not start until after the year 2018, a special penalty shall be assessed to sources that exceed the 2018 milestone (Section A.5 of the BC RH SIP, and Section 20.11.46.20 NMAC, which we are proposing to approve). BC shall seek at least the minimum financial penalty of \$5,000 per ton of SO<sub>2</sub> emissions in excess of a source's allowance limitation. Any source may resolve its excess emissions violation by agreeing to a streamlined settlement approach where the source pays a penalty of \$5,000 per ton or partial ton of excess emissions and the source makes the payment within 90 calendar days after the issuance of a notice of violation. Any source that does not resolve its excess emissions violation in accordance with the streamlined settlement approach will be subject to formal enforcement action, in which the AQCB shall seek a financial penalty for the excess emissions based on New Mexico's statutory maximum civil penalties. The special penalty provisions for 2018 will apply for each year after 2018 until BC determines that the 2018 milestone has been met. BC will evaluate the amount of the minimum monetary penalty during each five-year SIP review and the penalty will be adjusted to ensure that penalties per ton substantially exceed the expected cost of allowances, and thus provide the appropriate deterrent effect. The EPA is proposing to determine the RH SIP

submittal satisfies the special penalties provisions requirement at 40 CFR 51.309(d)(4)(vi)(B), and proposed approval of 20.11.46.20 NMAC is included in our proposal to approve 20.11.46 NMAC.

#### D. "Better-Than-BART" Demonstration

As discussed in Section IV.A of this preamble, if a state adopts an alternative program designed to replace "source-by-source" BART controls, the state must be able to demonstrate that the alternative program achieves greater reasonable progress than would be achieved by BART. In Section N of the BC RH SIP, *Demonstration that the SO2 Milestones Provide for Greater Reasonable Progress than BART* ("better- than-BART" demonstration), BC has included a demonstration of how the 309 program achieves greater reasonable progress than BART for SO<sub>2</sub>. Below is a discussion of how the 309 backstop trading program achieves greater reasonable progress than BART. Wyoming, Utah, and the State of New Mexico have also submitted SIPs with the same better than BART demonstration as BC and thus are relying on a consistent demonstration across the states.

#### 1. List of BART-eligible sources

Pursuant to 40 CFR 51.308(e)(2)(i)(A), BC's RH 309 SIP submittal offers a "better-than-BART" demonstration that lists the BART-eligible sources covered by the program in the section 309 states (see Table 3 below). BART eligible

sources are identified as those sources that fall within one of the 26 specific source categories, were built between 1962 and 1977 and have potential emissions of 250 tons per year of any visibility impairing air pollutant. (40 CFR 51.301). The WRAP identified three potential BART-eligible sources in BC. These were: PNM Reeves Generating Station, GCC Rio Grande Inc, and Cobisa Person Power Project. AQCB assessed whether these facilities were existing stationary facilities as defined at 40 CFR 51.301 and determined all three sources were determined to be not BART-eligible. These facilities did not meet the definition for BART eligibility, because PNM Reeves and GCC Rio Grande were not in existence and operation during the requisite time period, and the other facility did not have emission units in the 26 source categories for BART. We are proposing to determine that BC has satisfied 40 CFR 51.308(e)(2)(i)(A) and agree that there are no BART eligible sources in BC.

## 2. Subject to BART determination

Pursuant to 40 CFR 51.308(e)(2)(i)(B), the section 309 states conducted individual source modeling on the BART-eligible sources within their states to determine which sources in their state causes or contributes to visibility impairment and are thus subject to BART. Having no BART-eligible sources, no modeling was required for sources in Bernalillo County, and no BC sources were determined to be subject to BART.

The State of New Mexico, and Utah relied on modeling by the WRAP to identify sources subject to BART. Based on the list of identified sources, the WRAP performed the initial BART modeling for the State of New Mexico and Utah. The procedures used are outlined in the WRAP Regional Modeling Center (RMC) BART Modeling Protocol. The State of Wyoming performed separate modeling to identify sources subject to BART. The states established a threshold of 0.5 deciviews for determining if a single source causes or contributes to visibility impairment. If the modeling shows that a source has a 0.5 deciview impact at any Class I area, that source causes or contributes to visibility impairment and is subject to BART. Table 3 shows the BART-eligible sources covered by the 309 backstop program and whether they are subject to BART. We are proposing to determine that the RH 309 SIP submittal satisfies 40 CFR 51.308(e)(2)(i)(B).

Table 3 - Subject to BART Status for Section 309 BART-Eligible Sources

State	Company	Facility	Subject to BART?
New Mexico	Frontier	Empire Abo	No
New Mexico	Xcel Energy	SWPS Cunningham Station	No
New Mexico	Duke Energy	Artesia Gas Plant	No
New Mexico	Duke Energy	Linam Ranch Gas Plant	No
New Mexico	Dynegy	Saunders	No

<sup>&</sup>lt;sup>18</sup> CALMET/CALPUFF Protocol for BART Exemption Screening Analysis for Class I Areas in the Western United

States||, Western Regional Air Partnership (WRAP); Gail Tonnesen, Zion Wang; Ralph Morris, Abby Hoats and

Yiqin Jia, August 15, 2006. Available at:

http://pah.cert.ucr.edu/aqm/308/bart/WRAP RMC BART Protocol Aug15 2006.pdf

<sup>&</sup>lt;sup>19</sup> BART Air Modeling Protocol, Individual Source Visibility Assessments for BART Control Analyses, State of Wyoming, Department of Environmental Quality, Air Quality Division, Cheyenne, WY September 2006.

New Mexico	Giant Refining	San Juan Refinery	No
New Mexico	Giant Refining,	Ciniza Refinery	No
New Mexico	Xcel Energy	SWPS Maddox Station	No
New Mexico	Marathon	Indian Basin Gas Plant	No
New Mexico	Public Service of New Mexico	San Juan Generating Station	Yes
New Mexico		Rio Grande Station	No
New Mexico	Western Gas Resources	San Juan River Gas Plant	No
Utah	Pacificorp	Hunter	Yes
Utah	Pacificorp	Huntington	Yes
Wyoming	Basin Electric	Laramie River	Yes
Wyoming	Black Hills Power & Light	Neil Simpson I	No
Wyoming	Dyno Nobel	Dyno Nobel	No
Wyoming	FMC Corp.	Green River Soda Ash Plant	Yes
Wyoming	FMC Corp.	Granger River Soda Ash Plant	No
Wyoming	General Chemical	Green River Soda Ash Plant	Yes
Wyoming	P4 Production	Rock Springs Coking Plant	No
Wyoming	Pacificorp	Dave Johnston	Yes
Wyoming	Pacificorp	Jim Bridger	Yes
Wyoming	Pacificorp	Naughton	Yes
Wyoming	Pacificorp	Wyodak	Yes
Wyoming	Sinclair Oil Corp	Sinclair Refinery	No
Wyoming	Sinclair Refinery	Casper	No

# 3. Best system of continuous emission control technology

As required by 40 CFR 51.308(e)(2)(i)(C), each state is to determine what BART would be for each subject to BART source covered by the 309 backstop trading program. In the "better-than–BART" demonstration, all subject to BART electric generating units (EGUs) were assumed to be operating at the presumptive SO<sub>2</sub> emission rate provided in the BART Guidelines (0.15 lb/MMBtu). The 309 program also includes non-EGU subject to BART units. The non-EGU subject to BART units are four boilers located at two trona plants in Wyoming. Wyoming made a determination of what BART would be for these non-EGU units. One

trona plant recently installed pollution control projects achieving a 63 percent reduction in SO<sub>2</sub> from its two boilers. The State of Wyoming determined this control level would serve as a BART benchmark for all trona boilers. Thus, a 63 percent reduction in emissions from these sources was included as the BART benchmark in calculating emission reductions assuming application of BART at these sources. Emission reductions or the BART benchmark for all subject to BART sources covered by the 309 program was calculated to be 48,807 tons of SO<sub>2</sub>. We are proposing to determine the furnished analysis meets the requirements of 40 CFR 51.308(e)(2)(i)(C).

#### 4. Projected emissions reductions

As required by 40 CFR 51.308(e)(2)(i)(D), the RH 309 SIP submittal has provided the expected emission reductions that would result from the 309 backstop trading program. The "better- than-BART" demonstration projects that 2018 baseline emissions would be 190,656 tpy of SO<sub>2</sub> for the sources covered by the 309 program in the participating states. The reductions achieved by the program are 48,807 tpy of SO<sub>2</sub>, resulting in remaining emissions of 141,849 tpy of SO<sub>2</sub> in 2018. We are proposing to determine the analysis furnished to satisfy 40 CFR 51.308(e)(2)(i)(D) is acceptable.

# 5. Evidence that the trading program achieves greater reasonable progress than BART

We are proposing to approve the RH 309 SIP submittal's determination that the SO2 backstop trading program achieves greater reasonable progress than would be achieved through the installation of and operation of BART at all the sources subject to BART in the participating states, as required by 40 CFR 51.308(e)(2)(i)(E). As the RH 309 SIP submittal explains, the program ensures sources beyond BART sources are included. The backstop trading program includes all stationary sources with emissions greater than 100 tpy of SO<sub>2</sub> and thus encompasses 63 non-subject to BART sources. BART applied on a source-by-source basis would not affect these sources, and there would be no limitation on their future operations under their existing permit conditions, or allowable emissions. The milestones will cap these sources at actual emissions, which are less than current allowable emissions.

As the RH 309 SIP submittal also explains, the program also provides for a cap on new source growth. Future impairment is prevented by capping emissions growth from sources covered by the program and from entirely new sources in the region. BART applied on a source-specific basis would have no impact on future growth. The backstop trading program also provides a mass-based cap that has inherent advantages over applying BART to each individual source. The baseline emission projections and assumed reductions due to the assumption of BART-level emission rates on all sources subject to BART are all based on actual emissions, using 2006 as the baseline. If the BART process were applied on a source-by-

source basis to individual sources, emission limitations would typically be established as an emission rate (lbs/hr or lbs/MMBtu) that would account for variations in the sulfur content of fuel and alternative operating scenarios, or allowable emissions. A mass-based cap that is based on actual emissions is more stringent because it does not allow a source to consistently use this difference between current actual and allowable emissions.

#### 6. All emission reductions must take place during the first planning period

The first planning period ends in 2018. As discussed in the preamble above, the reductions from the 309 program will occur by 2018. We are therefore proposing to determine the submitted plan satisfies the requirement of 40 CFR 51.309(e)(2)(iii).

#### 7. Detailed description of the alternative program

The detailed description of the backstop trading program is provided in Section C – *Emission Reductions for Stationary Sources* of the BC RH SIP and the rules that govern it are found at 20.11.46 NMAC, which we are proposing to approve. We propose to determine the detailed description requirement in 40 CFR 51.309(e)(2)(iii) is met. The details of the backstop trading program are discussed in section V.E of this notice.

#### 8. Surplus Reductions

We propose to approve the determination in the RH 309 SIP submittal that all emission reductions resulting from the emissions trading program are surplus as of the baseline date of the SIP, as required by 40 CFR 51.208(e)(2)(iv).

## 9. Geographic Distribution of Emissions

The BC RH 309 SIP submittal includes a summary of modeling conducted by the WRAP in 2000 to compare the visibility improvement expected from BART to the backstop trading program for the Class I areas on the Colorado Plateau. A summary of the modeling results can be found in Section N of the BC RH SIP, which refers to data from modeling included in Tables 2 and 3 of Attachment C to the Annex. <sup>20,21</sup> This modeling was conducted during the development of the Annex to examine if the geographic distribution of emissions under the trading program would be substantially different and disproportionately impact any Class I area due to a geographic concentration of emissions. The modeled visibility improvement for the best and worst days at the Class I areas for the 309 program is similar to improvement anticipated from the BART scenario (within 0.1 dv) on

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<sup>&</sup>lt;sup>20</sup> Voluntary Emissions Reduction Program for Major Industrial Sources of Sulfur Dioxide in Nine Western States and A Backstop Market Trading Program, an Annex to the Report of the Grand Canyon Visibility Transport Commission (September 2000) at C-15 and 16.

<sup>&</sup>lt;sup>21</sup> WRAP conducted modeling of the degree of visibility improvement that would occur on average and for the 20% best and worst visibility days. The WRAP used the transfer coefficients developed as part of the Integrated Assessment System (IAS) and used by the Grand Canyon Visibility Transport Commission. As noted in the Annex , this modeling has limitations which must be considered when interpreting the results.

the worst and best visibility days, thus —if we assume participation and milestones consistent with the model —demonstrating that the distribution of emissions between the BART scenario and the 309 trading program are not substantially different. We note this modeling demonstration included nine states, many of which are not participating in the backstop trading program. We believe this modeling demonstration adds support to our proposed determination discussed above in this section that the RH 309 SIP submittal appropriately shows the trading program will achieve greater reasonable progress than would be achieved through the installation and operation of BART, as required by 40 CFR 51.308(e)(2)(i)(E).

# E. Requirements for Alternative Programs with an Emissions Cap

Since the 309 trading program is a backstop trading program, the provisions outlined below will only apply if the milestone is exceeded and the program is triggered. We are proposing to approve 20.11.46 NMAC, which provides enforceable rules that govern the triggering and administration of the program. The analysis that follows shows that the backstop trading program is consistent with the elements for trading programs outlined in 40 CFR 51.308(e)(2)(vi), as required by Section 309. See 40 CFR 51.309(d)(4)(v).

### 1. Applicability Provisions

Pursuant to 40 CFR 51.308(e)(2)(vi)(A), the backstop trading program has the same applicability requirements in all states opting to participate in the program. 20.11.46.11 NMAC, which we are proposing to approve, contains the applicability provisions, which indicates that the backstop trading program generally applies to all stationary sources that emit 100 tons per year or more of SO<sub>2</sub> in the program trigger year. We are proposing to approve the 20.11.46.11 NMAC as meeting the requirements of 40 CFR 51.308(e)(2)(vi)(A).

#### 2. Allowance Provisions

Part C.C1 of the AQCB RH SIP and 20.11.46.14 NMAC, which we propose to approve, contain the allowance allocation provisions as required by 40 CFR 51.308(e)(2)(vi)(B). The rule requires sources to open a compliance account in order to track allowances and contains other requirements associated with those accounts. These SIP provisions also contain the provisions on how BC will allocate allowances and states that the total number of allowances distributed cannot exceed the milestone for any given year. We are proposing to approve the submitted 20.11.46.14 NMAC as meeting 40 CFR 51.308(e)(2)(vi)(B).

### 3. Monitoring and Recordkeeping Provisions

As required by 40 CFR 51.308(e)(2)(vi)(C) – (E), the submitted rule 20.11.46.16.A.1 NMAC provides that sources subject to 40 CFR part 75 under a

separate requirement from the backstop trading program shall meet the requirements contained in part 75 with respect to monitoring, recording and reporting SO<sub>2</sub> emissions. If a unit is not subject to 40 CFR part 75 under a requirement separate from the trading program, BC requires that a source use one of the following monitoring methods: 1) a continuous emission monitoring system (CEMS) for SO<sub>2</sub> and flow that complies with all applicable monitoring provisions in 40 CFR part 75; 2) if the unit is a gas- or oil-fired combustion device, the monitoring methodology in Appendix D to 40 CFR part 75, or, if applicable, the low mass emissions provisions (with respect to SO<sub>2</sub> mass emissions only) of section 75.19(c) of 40 CFR part 75; 3) one of the optional protocols, if applicable, in 20.11.46.21 NMAC or 20.11.46.22 NMAC; or 4) a petition for site-specific monitoring that the source submits for approval by AQCB and the EPA in accordance with Paragraph (5) Subsection O of 20.11.46.16 NMAC. All the above sources are required to comply with the reporting and recordkeeping requirements in 40 CFR part 75.

Although most sources covered by the backstop trading program will be able to meet the monitoring requirements stated above, there are some emission units that are either not physically able to install the needed equipment or do not emit enough sulfur dioxide to justify the expense of installing these systems. As discussed in part C5.3 of the AQCB RH SIP, the trading program allows these emission units to continue to use their pre-trigger monitoring methodology, but does not allow the source to transfer any allocation to that unit to another source.

The program requires that the allowances associated with emission units that continue to use their pre-trigger monitoring methodology be placed in a special reserve compliance account, while allowances for other emission units are placed in a regular compliance account. Sources may not trade allowances out of a special reserve compliance account, even for use by emission units at the same source, but can use the allowances to show compliance for that particular unit.

Subsection A of 20.11.46.16 NMAC allows sources with any of the following emission units to apply to establish a special reserve compliance account: 1) any smelting operation where all of the emissions from the operation are not ducted to a stack; 2) any flare, except to the extent such flares are used as a fuel gas combustion device at a petroleum refinery; or 3) any other type of unit without add-on sulfur dioxide control equipment, if the unit belongs to one of the following source categories: cement kilns, pulp and paper recovery furnaces, lime kilns, or glass manufacturing. Pursuant to the submitted 20.11.46.16 NMAC, sources with a special reserve compliance account are required to submit to BC an annual emissions statement and sources are required to maintain operating records sufficient to estimate annual emissions consistent with the baseline emission inventory submitted in 1998. We are proposing to approve the submitted 20.11.46.16 NMAC and find the submitted trading program is consistent with the monitoring, recordkeeping and reporting requirements in 40 CFR 51.308(e)(2)(vi)(C) through (E).

# 4. Tracking System

As required by 40 CFR 51.308(e)(2)(vi)(F), section C2 of the submitted RH 309 SIP provides the overarching specifications for an Emissions and Allowance Tracking System (EATS). According to the BC RH SIP submittal, the EATS must provide that all necessary information regarding emissions, allowances, and transactions is publicly available in a secure, centralized database. The EATS must ensure that each allowance is uniquely identified, allow for frequent updates, and include enforceable procedures for recording data. If the program is triggered, AQCB will work with the State of New Mexico, other states, and tribes participating in the trading program to implement this system. More detailed specifications for the EATS are provided in the WEB Emission and Allowance Tracking System (EATS) Analysis.<sup>22</sup> BC assumes responsibility for ensuring that all the EATS provisions are completed as described in its SIP.

In addition, BC will work with the State of New Mexico and the other participating states to designate one tracking system administrator (TSA). The submitted RH 309 SIP provides that the TSA shall be designated as expeditiously as possible, but no later than six months after the program trigger date. BC will enter into a binding contract with the TSA that shall require the TSA to perform all TSA functions described in the SIP and in 20.11.46 NMAC, such as

<sup>&</sup>lt;sup>22</sup> Western Backstop (WEB) Emissions and Allowance Tracking System (EATS) Analysis. Perrin Quarles Associates, Inc. July 18, 2003. Available at:

http://www.wrapair.org/forums/mtf/documents/eats/WEB EATS Final Report July 31.pdf

transferring and recording allowances. We propose to determine the submitted trading program has adequate tracking system provisions in accordance with CFR 51.308(e)(2)(vi)(F).

# 5. Account Representative

Pursuant to 40 CFR 51.308(e)(2)(vi)(G), the submitted RH 309 SIP relies on submitted rule 20.11.46.12 NMAC, which contains provisions for the establishment of an account representative. The SIP submittal requires each source to identify one account representative. The account representative shall submit to BC and the TSA a signed and dated certificate that contains a certification statement verifying that the account representative has all the necessary authority to carry out the account representative responsibilities under the trading program on behalf of the owners and operators of the sources. The certification statement also needs to indicate and that each such owner and operator shall be fully bound by the account representatives representations, actions, inactions, or submissions and by any decision or order issued to the account representative by BC regarding the trading program. We are proposing to determine the submitted rule 20.11.46.12 NMAC and the submitted SIP meet the requirements for "authorized account representative provisions" in 40 CFR 51.308(e)(2)(vi)(G).

#### 6. Allowance Transfers

The submitted RH 309 SIP establishes procedures pertaining to allowance transfers to meet the requirement of 40 CFR 51.308(e)(2)(vi)(H). 20.11.46.17 NMAC, a submitted rule we propose to approve, contains requirements sources must follow for allowance transfers. To transfer or retire allowances, the account representative shall submit the transfer account number(s) identifying the transferor account, the serial number of each allowance to be transferred, the transferor's account representative's name and signature, and date of submission. The allowance transfer deadline is midnight Pacific Standard Time on March 1 of each year following the end of the control period. Sources must correctly submit transfers by this time in order for a source to be able to use the allowance to demonstrate compliance. We are proposing to approve 20.11.46.17 as being consistent with the program elements required at 40 CFR 51.308(e)(2)(vi)(H).

Section C3 of the RH 309 SIP provides the procedures the TSA must follow to transfer allowances. The TSA will record an allowance transfer by moving each allowance from the transferor account to the transferee account as specified by the request from the source, if the transfer is correctly submitted and the transferor account includes each allowance identified in the transfer. Within five business days of the recording of an allowance transfer, the TSA shall notify the account representatives of both the transferor and transferee accounts, and make the transfer information publicly available on the Internet. Within five business days of receipt of an allowance transfer that fails to meet the requirements for transfer,

the TSA will notify the account representatives of both accounts of the decision not to record the transfer, and the reasons for not recording the transfer. We are proposing to determine the submitted trading program is consistent with the "allowance transfer provisions" requirement of 40 CFR51.308(e)(2)(vi)(H).

# 7. Compliance Provisions

Pursuant to 40 CFR 51.308(e)(2)(vi)(I), the trading program in the submitted RH 309 SIP provides the procedures for determining compliance and relies on submitted rule 20.11.46.19 NMAC, which we are proposing to approve. Per this submitted rule, the source must hold allowances as of the allowance transfer deadline in the source's compliance account (together with any current control year allowances held in the source's special reserve compliance account) in an amount not less than the total SO<sub>2</sub> emissions for the control period from the source. AQCB determines compliance by comparing allowances held by the source in their compliance account(s) with the total annual SO<sub>2</sub> emissions reported by the source. If the comparison of the allowances to emissions results in emissions exceeding allowances, the source's excess emissions are subject to the allowance deduction penalty in 20.11.46.19 C. NMAC (discussed in further detail below). We are proposing to determine the submitted rule 20.11.46.19 NMAC is consistent with the "compliance provisions" requirement of 40 CFR 51.308(e)(2)(vi)(I).

### 8. Penalty Provisions

The submitted rule 20.11.46.19 C. NMAC provides the penalty provisions as required by 40 CFR 51.308(e)(2)(vi)(J). Per this section, a source's allowances will be reduced by an amount equal to three times the source's tons of excess emissions if they are unable to show compliance. We are proposing to determine the submitted rule 20.11.46.19 is consistent with the "penalty provisions" requirement of 40 CFR 51.308(e)(2)(vi)(J).

# 9. Banking of Allowances

As allowed by 40 CFR 51.308(e)(2)(vi)(K), 20.11.46.18 NMAC, which we propose to approve, allows sources to use allowances from current and prior years to demonstrate compliance, with some restrictions. Sources can only use 2018 allowances to show compliance with the 2018 milestone and may not use allowances from prior years. In order to insure that the use of banked allowances does not interfere with the attainment or maintenance of reasonable progress goals, the backstop trading program includes flow-control provisions (see section C4 of the RH 309 SIP submittal). The flow control provisions are triggered if the TSA determines that the banked allowances exceed ten percent of the milestone for the next control year, and thereby ensure that too many banked emissions are not used in any one year. We are proposing to determine the submitted trading program has provisions that clarifies the restrictions on the use of banked

allowances, consistent with the requirement in 40 CFR 51.308(e)(2)(vi)(K).

#### 10. Program Assessment

Pursuant to 40 CFR 51.308(e)(2)(vi)(L), section D1 of the BC RH SIP submittal contains provisions for a 2013 assessment. For the 2013 assessment, BC will work with the State of New Mexico and other participating states to develop a projected emission inventory for SO<sub>2</sub> through the year 2018. BC will then evaluate the projected inventory and assess the likelihood of meeting the regional milestone for the year 2018. BC shall include this assessment as part of the 2013 progress report that must be submitted under 40 CFR 51.309(d)(10). We are proposing to determine the RH 309 SIP submittal is consistent with the program assessment provisions requirement in 40 CFR 51.308(e)(2)(vi)(L).

# F. Provisions for Stationary Source NOx and PM

Pursuant to 40 CFR 51.309(d)(4)(vii) and 40 CFR 51.309(g), BC's RH SIP submittal contains BART and long-term strategies to address NOx and PM emissions. As previously discussed, no sources in Bernalillo County satisfied the definition for BART-eligible sources at 40 CFR 51.301. An assessment of emissions control strategies for stationary source NOx and PM, and the degree of visibility improvement that would result from implementation of the identified strategies was prepared by the WRAP. This report, *Stationary Source NOx and PM Emissions in the* 

WRAP Region: An Initial Assessment of Emissions, Controls, and Air Quality

Impacts, is included in Appendix H-O of the AQCB RH SIP. This report represents
the initial assessment of stationary source NOx and PM strategies for regional haze.

Long-term strategies are discussed in section V. N below.

#### **G.** Mobile Sources

Pursuant to 40 CFR 51.309(d)(5)(i), BC, in collaboration with the WRAP, assembled a comprehensive statewide inventory of mobile source emissions that was included in the RH 309 SIP submittal. The inventory included on-road and non-road mobile source emissions inventories for western states for the time period 1996 through 2018, inventorying 1996, and then projecting 2003, 2008, 2013, and 2018.<sup>23</sup> These inventories for New Mexico and the Albuquerque urban area are summarized in Tables 10, 10.1, 10.2, and 10.3 of the BC RH SIP. Mobile source emissions (on-road and non-road) are projected to be at their lowest level within Bernalillo County at the end of the planning period primarily due to on-road vehicle emission and fuel standards established by the EPA.

An emission inventory update was also done for a 2002 base year and emission projections for the years 2008, 2013, and 2018.<sup>24</sup> The inventory shows a continuous

<sup>&</sup>lt;sup>23</sup> Appendix 2007-C of the AQCB RH SIP, Summary and Discussion of 1996 Through 2018 Mobile Source Emissions Inventories. Technical Memo from Tom Moore to Mobile Sources Forum. November 26, 2002.; Final Report: Development of WRAP Mobile Source Emission Inventories, ENVIRON, Feb. 9, 2004

<sup>&</sup>lt;sup>24</sup> Detailed information on the emission inventory is contained in the ENVIRON Report *WRAP Mobile Source Emission Inventories Update*, May 2006.

decline in emissions from mobile sources from VOC, NOx, PM<sub>2.5</sub>, elemental carbon (EC), and organic carbon (OC) emissions over the period of 2002-2018. Per 40 CFR 51.309(d)(5)(i)(A), the inventories show a decline in mobile source emissions and therefore no further action is required by the AQCB to address mobile source emissions.

Pursuant to 40 CFR 51.309(d)(5)(i)(B), Section D 1.(c) of the BC RH SIP states that BC will submit a SIP revision no later than December 31, 2013, containing any longterm strategies necessary to reduce SO<sub>2</sub> emissions from non-road mobile sources consistent with the goal of reasonable progress, if necessary, based on consideration of the emission reductions achieved by Federal standards. We note the available emission inventory projections show that there will be a 99 percent decrease in SO<sub>2</sub> emissions from non-road mobile sources for 2002-2018. The reduction will result from compliance with EPA's rule titled Control of Emissions of Air Pollution from Non-road Diesel Engines and Fuel (see 69 FR 38958). A 99 percent reduction in SO<sub>2</sub> from non-road mobile sources is consistent with the goal of reasonable progress and no other long-term strategies are necessary to address SO<sub>2</sub> emissions from non-road mobile sources at this time. Pursuant to 40 CFR 51.309(d)(5)(ii), BC will submit interim reports to the EPA in 2013 and 2018 on the implementation of regional and local recommendations from the GCVTC report pertaining to mobile sources. BC will include these reports as part of the reports required by 40 CFR 51.309(d)(10). We propose to determine the RH 309 SIP submittal satisfies the requirements of 51 CFR 51.309(d)(5).

#### H. Programs Related to Fire

Pursuant to 40 CFR 51.309(d)(6), the BC RH SIP submittal must provide for an evaluation of how its SIP meets the 51.309(d)(6) "Programs related to fire" requirements.

Based on our review of Section E of the BC RH SIP submittal, we propose to find that the RH SIP submittal meets the 309(d)(6) requirements as discussed in detail below. We also propose approval of revisions to the BC's Open Burning rule submitted to us on December 26, 2003 and July 28, 2011. The 2003, and the 2011 submittals revise and replace BC's Open Burning rule of 1980 that the EPA approved into the SIP. By proposing to approve the December 26, 2003, and the July 28, 2011 submittals, we are proposing to repeal BC's Open Burning rule of 1980 from the SIP.

#### 1. Evaluation of Current Fire Programs

BC's submittal meets 51.309(d)(6)(i) as it demonstrates how its smoke management program and all federal or private programs for prescribed fire in BC have a mechanism in place for evaluating and addressing the degree of visibility impairment from smoke in their planning and application of burning. For example, Tables 11 and 12 of the BC RH SIP submittal document the relevant federal, state and local programs that address visibility. See Tables 11 and 12 for

references to the State of New Mexico's Open Burning Rule (20.2.60 NMAC), and the State of New Mexico's Smoke Management Rule (20.2.65 NMAC). To address local programs, BC has adopted the Albuquerque-Bernalillo County Open Burning Regulation (20.11.21 NMAC) and submitted this to us for SIP approval and as noted previously, today we are proposing to approve it. The rule was first approved by the EPA on April 10, 1980. See 45 FR 24468. To address the Regional Haze Rule requirements, the AQCB later revised it rules in 2003 and 2011. See submittals at the EPA docket identified No. EPA-R06-OAR-2009-0648. A more detailed discussion of our proposed approval of the BC Open Burning Rule can be found in the TSD. There are two types of burns specified by the rule. PB-I burns are those burn projects expected to generate less than one ton per day of PM<sub>10</sub> and PB-II burns are those burn projects expected to generate one ton per day or more of PM<sub>10</sub>.

We propose to find that BC's Open Burning Rule meets the specific additional requirements of 51.309(d)(6)(i) which address: a) actions to minimize emissions, b) evaluation of smoke dispersion, c) alternatives to fire, d) public notification, e) air quality monitoring, f) surveillance and enforcement, and g) program evaluation. These are discussed below.

#### a. Actions to Minimize Emissions

In order to minimize emissions, Section 20.11.21.19 of BC's Open Burn Rule

requires the use of emission reduction techniques (ERT) by burners. Any techniques used in conjunction with burning that reduce the actual amount of emissions produced from a planned burn project are considered emission reduction techniques. Emission reduction techniques are described in 20.11.21.19 NMAC and include reducing the area burned, mechanical treatments, chemical pre-treatments, site conversion, land use change, reduction in fuel loading, reduction in fuel consumption, minimization of emission factor, and the use of an air curtain incinerator. The rule requires land managers burning PB-II burns to use at a minimum, one emission reduction technique included in 20.11.21.19 NMAC for each planned burn project (20.11.21.15 C.(3) NMAC). PB-II burners will indicate on the required form which emission reduction techniques are being utilized for each planned burn project. We propose to find that this portion of the Open Burning rule meets this requirement.

#### b. Evaluation of Smoke Dispersion

To evaluate smoke dispersion, 20.11.21.15 B.(1)(b) NMAC only allows PB-I burns to be ignited during daytime hours when the ventilation index category is rated "Good" or better as determined by using the methodology outlined in 20.11.21.17 NMAC. To comply with this requirement, the burner must conduct visual monitoring and document the results in writing. These results include an evaluation of the smoke dispersion by recording characteristics of

the smoke (e.g., color, density), including the general compass direction of dispersion, the patterns of vertical dispersion, and the duration of the smoke plume(s), and corresponding time-of-day information. For burns within 1 mile of a population, the burner must notify the population in advance and AQCB may choose to conduct instrument monitoring (20.11.21.15 B.(5) NMAC)

For PB-II burns, 20.11.21.15 C. NMAC provides the burner can ignite a planned burn project only during times when the ventilation category is "Good" or better<sup>25</sup> as determined by using the methodology outlined in 20.11.21.17 NMAC, and must notify the public at least two days prior to the burn. The burner must conduct visual monitoring and document the results in writing. The AQCB may choose to conduct instrument monitoring in addition to visual monitoring. We propose to find that this portion of the Open Burning rule meets this requirement.

#### c. Alternatives to Fire

To address the alternatives to fire requirement, 20.11.21.15 C.(2) NMAC requires that for burns exceeding 1 ton  $PM_{10}$  emissions per day, burners must consider the use of alternatives to burning. Burners must then document that

<sup>&</sup>lt;sup>25</sup> Ventilation category is a classification that describes the potential for smoke to ventilate away from its source. The classification (Excellent, Very Good, Good, Fair, Poor) is determined by multiplying the mixing height in feet by the transport winds in knots, thus providing the ventilation category in knot-feet. The ventilation category can be found in the National Weather Service's Fire Weather Forecast, which is the State approved source for this information

the use of alternatives to burning was considered prior to the decision to utilize fire. The documentation includes citing the feasibility criterion that prevented the use of alternatives. This documentation must be included on the registration form provided by the AQCB. The alternatives to fire that must be considered are described in 20.11.21.18 NMAC. We propose to find that this portion of the Open Burning rule meets this requirement.

#### d. Public Notification

To meet the public notification requirements, 20.11.21.15 B.(5)(b) NMAC requires that for PB-I burns, burners must make a good faith effort to notify the populations that are located within one mile of the planned burn project. The method of notification shall be an advertisement in a newspaper of general circulation in the area where the burn will take place, or other means, as approved by the AQCB to ensure that adequate notice is provided to the affected public. The burner must conduct public notification no sooner than 30 days and no later than two days in advance of the ignition of the planned burn project. In addition, the burner will also notify the local fire authorities prior to igniting a burn and register the burn project with Albuquerque environmental health department as required by 20.11.21.15 B.(2)-(3) NMAC. The Open Burning rule at 20.11.21.15 (C) NMAC requires that for PB-II burns, burners must make a good faith effort to notify the public using an advertisement in a newspaper of general circulation in the area where the burn

will take place, or other means, as approved by the AQCB to ensure that adequate notice is provided to the affected public. The burner must conduct public notification no sooner than 30 days and no later than two days in advance of the ignition of the planned burn project as required by 20.11.21.15 C.(11) NMAC. In addition, the burner will also notify the local fire authorities prior to igniting a burn and register the burn project with Albuquerque environmental health department as required by 20.11.21.15 C.(6)-(7) NMAC. We propose to find that this portion of the Open Burning rule meets this requirement.

# e. Air Quality Monitoring

To address air quality monitoring, NMAC sections 20.11.21.15 B.(1)(b)(ii), B.(5)(a), and C.(5) require that PB-I and PB-II burners conduct and document visual monitoring on all planned burn projects. Burners will evaluate the smoke dispersion by recording characteristics of the smoke (e.g., color, density), including the general compass direction of dispersion, the patterns of vertical dispersion, and the duration of the smoke plume(s). The use of monitoring equipment will be based on the planned burn project's proximity to a population, nonattainment area, or Class I area and will be determined on a case-by-case basis. We propose to find that this portion of the Open Burning rule meets this requirement.

#### f. Surveillance and Enforcement

To address surveillance and enforcement requirements, 20.11.21 NMAC requires that the permittee submit reports and burn project tracking forms to the AQCB on PB-I and PB-II burns. See 20.11.21.15 NMAC. In addition, 20.11.21.13F states that any permit issued under the rule may be revoked or suspended, if the applicant fails to comply with the permit provisions therein, and the permittee may be subject to enforcement actions. We propose to find that this portion of the Open Burning rule meets this requirement.

## g. Program Evaluation

Pursuant to 40 CFR 51.309(d)(6)(i), BC has included in the RH 309 SIP submittal an evaluation of its smoke management program and all Federal, State, and private prescribed fire smoke management programs in Bernalillo County based on the potential to contribute to visibility impairment in the 16 Class I Areas of the Colorado Plateau, and how visibility protection from smoke is addressed in planning and operation. The RH SIP submittal also contains an evaluation of whether its smoke management program and these prescribed fire smoke management programs contain the following elements: actions to minimize emissions; evaluation of smoke dispersion; alternatives to fire; public notification; air quality monitoring; surveillance and enforcement; and program evaluation. The SIP at Section E(b) and Tables 11 and 12

describe the results of these evaluations in detail. For example, BC commits to host an annual meeting with all burners and interested stakeholders to assess the adequacy of the design, impact, and implementation of the program. BC commits to review gathered data with stakeholders on an annual basis that will serve to establish annual emissions goals. It has also adopted an Open Burning regulation at 20.11.21 NMAC that serves as the foundation of the Open Burning Program, which the AQCB administers and enforces. We propose to find that the BC RH SIP submittal meets the requirement for program evaluation under 51.309(d)(6)(i)

# 2. Inventory and Tracking System

Pursuant to 40 CFR 51.309(d)(6)(ii), States must include in their section 309 plan a statewide process for gathering the essential post-burn activity information to support emissions inventory and tracking systems. The BC RH SIP submittal provides for inventory and tracking measures that we propose to find meet the 309(d)(6)(ii) requirement. See Section E(c) of the BC RH SIP submittal. For example, BC's Open Burning rule at 20.11.21.15 NMAC includes requirements for PB-I and PB-II burners to report on emissions from their burns including quantitative information regarding fuel types, fuel consumption, and type of burn to maintain an adequate emission inventory. The AQCB maintains a fire emission inventory of the following pollutants: VOC, NOx, elemental carbon, organic carbon, and fine particulate for fire sources within Bernalillo County.

20.11.21.15.B(4) NMAC requires applicants for PB-I burns to complete and submit to the AQCB a burn project tracking form within two weeks after completion of the burn activity. 20.11.21.15.C(9) NMAC requires applicants for PB-II burns to complete and submit to the AQCB a burn project tracking form within two weeks after completion of the burn activity. Completion of these tracking forms in conjunction with the emission quantification requirements described in 20.11.21.16 should serve as the basis for inventory and tracking of emissions in Open Burning rule. The emissions tracking system follows the WRAP Fire Tracking System Policy (See Appendix K-O of the ABQ RH SIP). BC will submit emission inventory reports to the WRAP and each year, BC will complete an emissions inventory and submit the report to the State of New Mexico, as required under 20.11.47 Emissions Inventory Requirements. We are proposing to determine the RH SIP submittal meets these requirements.

#### 3. Identification and Removal of Administrative Barriers

We propose to find that the BC RH SIP submittal meets the requirements for 309(d)(6)(iii) that requires that States identify existing administrative barriers to the use of non-burning alternatives and adopt a process for continuing to identify and remove administrative barriers where feasible. Section E(d) of the RH SIP submittal, describes the process the AQCB commits to undertake to address this requirement. For example, the AQCB is committed to work with key public and private entities to identify and remove administrative barriers to the use of

alternatives to burning for prescribed fire on federal, State, and private lands, pursuant to 40 CFR 51.309(d)(6)(iii). The process is collaborative and provides for continuing identification and removal of administrative barriers, and considers economic, safety, technical and environmental feasibility criteria, and land management objectives. The BC RH SIP relies on Non-burning Alternatives for Vegetation and Fuel Management, and Burning Management Alternatives on Agricultural Lands in the Western United States (Appendix 2007-E of the BC RH SIP) developed by the WRAP for non-burning alternatives and methods to assess their applicability. Should the AQCB determine that an administrative barrier exists, the AQCB will work collaboratively with the appropriate public and private entities to evaluate the administrative barrier, identify the steps necessary to remove the administrative barrier, and initiate the removal of the administrative barrier, where it is feasible to do so. During the development of revisions to the Open Burning rule, the AQCB identified one potential administrative barrier to the use of non-burning alternatives that concerns the use of air curtain incinerators (ACIs). An ACI is a pollution control device which operates by forcefully projecting a curtain of air across an open chamber or pit in which combustion occurs. Introducing high velocity air into the combustion zone acts as a "curtain" and trapping the smoke and the particulate matter. Use of this control device will enhance combustion, compared with open burning, and will curb smoke and particulate emissions. This curtain also helps with maintaining a higher combustion zone temperature, thus improving the efficiency of the burn. Furthermore, ACIs reduce risk of an escaped fire and could be considered for

safety reasons. Therefore, use of ACIs as an ERT is acceptable. Such a use would be available to a source through BC's regulation 20.22.7 NMAC. As BC's rules are currently structured, ACI's are not allowed (See 20.11.68 NMAC) unless a variance to such a prohibition is granted by BC under existing rules. See 20.22.7 NMAC. In addition, the granting or approval of a variance by the board does not mean automatic approval by the EPA. A source operating under a variance may be subject to federal enforcement for not meeting the SIP unless the state/local agency adopts and submits the variance to the EPA approval as a SIP revision. We suggest that BC be proactive in taking the necessary steps they need to revise their Open Burning rules to allow for ACI's in appropriate circumstances without the need to issue variances. The alternatives to fire developed by BC are described in 20.11.21.18 NMAC.

#### 4. Enhanced Smoke Management Program

We propose to find that BC's RH SIP submittal and Open Burning rule meet the requirements for 309(d)(iv) that requires the SIP include an enhanced smoke management program, which means the smoke management program considers visibility and is based on the criteria of efficiency, economics, law, emission reduction opportunities, land management objectives, and reduction of visibility impairment. Pursuant to 40 CFR 51.309(d)(6)(iv), the smoke management programs that operate within Bernalillo County are consistent with the *WRAP Policy on Enhanced Smoke Management Programs for Visibility* (WRAP ESMP).

A copy of this policy can be found in the Appendix M-O of the BC RH SIP submittal. The intent of the WRAP ESMP is to assist states to address visibility effects associated with fire in a way that is adequate for a SIP. The BC's Open Burning regulation, 20.11.21 NMAC, which became effective on December 31, 2003 and was subsequently amended and submitted for approval meets the Enhanced Smoke Management Program (ESMP) policy and the Regional Haze Rule (RHR) requirements as described above.

#### 5. Annual Emission Goal

We propose to find that BC's RH SIP submittal meets the requirements for 309(d)(v) that requires that States adopt a process to establish annual emission goals to minimize emission increases from fire. Pursuant to 40 CFR 51.309(d)(6)(v), BC's RH SIP submittal describes how it meets this requirement. It has committed to use the policies set out by *Western Regional Air Partnership Policy on Annual Emission Goals for Fire* to minimize emission increases in fire through the use of annual emission goals. A copy of this policy can be found in Appendix N-O of the BC RH SIP. BC will use a collaborative mechanism for setting annual emission goals and developing a process for tracking their attainment on a yearly basis. In addition, BC's Open Burning rule at 20.11.21.19 NMAC relies on emission reduction techniques (ERT), where appropriate, to minimize emission increases in fire within Bernalillo County. Under that rule, BC will quantify the ERTs that are being used within Bernalillo County on a project-

specific basis to reduce the total amount of emissions being generated from areas where prescribed fire is being used. As described above, the amended Open Burning regulation, 20.11.21 NMAC, requires the use of at least one ERT for all prescribed fires with emissions exceeding one ton of  $PM_{10}$  per day.

# I. Paved and Unpaved Road Dust

To meet the requirements of 40 CFR 51.309(d)(7), the submitted RH 309 SIP relies on the assessment WRAP performed on the impact of dust emissions from paved and unpaved roads on the 16 Class I areas of the Colorado Plateau. The WRAP modeled and calculated the significance of road dust in terms of the impact on visibility on the worst 20 percent days. The modeled regional impact of road dust emissions ranged from 0.31 deciviews at the Black Canyon of the Gunnison National Park to 0.08 deciviews at the Weminuche Wilderness Area. For more information on the WRAP modeling and assessment of road dust impacts, see Chapter 7 of the WRAP TSD. <sup>26</sup> Based on the WRAP modeling, the AQCB has concluded in section F of the SIP that road dust is not a significant contributor to visibility impairment in the 16 Class I areas. We propose to agree that road dust is not a significant contributor to visibility impairment. Since AQCB has found that road dust is not a significant contributor to visibility impairment, there is no need to include road dust control strategies in the SIP pursuant to 40 CFR 51.309(d)(7). AQCB will track road dust emissions with the

<sup>&</sup>lt;sup>26</sup> WRAP Regional Technical Support Document for the Requirements of §309 of the Regional Haze Rule (64 Federal Register 35714 – July 1, 1999) revised May 7, 2008.

assistance of the WRAP and provide an update on paved and unpaved road dust emission trends, including any modeling or monitoring information regarding the impact of these emissions on visibility in the 16 Colorado Plateau Class I Areas. These updates will include a reevaluation of whether road dust is a significant contributor to visibility impairment. These updates shall be part of the periodic implementation plan revisions pursuant to 40 CFR 51.309(d)(10). We propose to determine the submitted RH 309 SIP satisfies 40 CFR 51.309(d)(7).

We note BC has taken additional measures to address fugitive dust in *Fugitive Dust Control*, 20.11.20 NMAC, <sup>27</sup> in order to protect human health and air quality. The regulation requires the use of reasonably available control measures to reduce fugitive dust that adversely affects public health, welfare, safety, or impairs visibility.

#### J. Pollution Prevention

Under 40 CFR 51.309(d)(8), states must provide information on renewable energy and other pollution prevention efforts in the state. 40 CFR 51.309(d)(8) does not require states to adopt any new measures or regulations. We propose to find the information BC provided in the RH 309 SIP submittal adequate to meet the requirements of 40 CFR 51.309(d)(8) as discussed below.

#### 1. Description of Existing Pollution Prevention Program

<sup>&</sup>lt;sup>27</sup> 20.11.20 NMAC was previously approved by EPA on April 1, 2009 (74 FR 14731)

Pursuant to 40 CFR 51.309(d)(8)(i), Tables 13 through 17of the BC RH SIP submittal summarize all pollution prevention and renewable energy programs currently in place in New Mexico (as of 2003) that could affect Bernalillo County. Table 18 shows all renewable energy capacity and production in use or planned in the county as of 2002 (See Appendix O-O for Statewide capacity and production). BC also determined the total energy generation capacity and production within Bernalillo County and New Mexico.

# 2. Incentive Programs

Per 40 CFR 51.309(d)(8)(ii), Table 20 of the BC RH SIP submittal identifies incentive programs in the State of New Mexico that reward efforts for early compliance or to go beyond compliance by participating in the 309 regional SO<sub>2</sub> backstop trading program. The backstop trading program allows for early reduction credits. Sources of SO<sub>2</sub> subject to the trading program that reduce emissions prior to the program trigger date shall receive additional emission allowances. The source may use such allowances for compliance purposes or may sell them to other parties.

#### 3. Programs to Preserve and Expand Energy Conservation Efforts

Per 40 CFR 51.309(d)(8)(iii), Tables 13 through 17 of the BC RH SIP submittal 100

discuss the policies and programs within the State of New Mexico that preserve and expand energy conservation efforts and renewable energy which have a direct effect on Bernalillo County.

# 4. Potential for Renewable Energy

Pursuant to 40 CFR 51.309(d)(8)(iv), the RH SIP submittal contains an assessment of areas where there is the potential for renewable energy to supply power in a cost effective manner. Appendix O-O of the submitted RH SIP summarizes the potential for renewable energy development in New Mexico.

# 5. Projections of Renewable Energy Goals, Energy Efficiency, and Pollution Prevention Activities

Pursuant to 40 CFR 51.309(d)(8)(v), the submitted BC RH SIP submittal uses projections made by the WRAP of the short and long-term emissions reductions, visibility improvements, cost savings, and secondary benefits associated with renewable energy goals, energy efficiency, and pollution prevention activities. (A complete description of these projections can be found in Appendix O-O of the SIP). The SIP provides overall projections of visibility improvements for the 16 Class I areas (Table 2). These projections include the combined effects of all measures in this SIP, including air pollution prevention programs. Although emission reductions and visibility improvements from air pollution prevention

programs are expected at some level, they were not explicitly calculated because the resolution of the regional air quality modeling system is not currently sufficient to show any significant visibility changes resulting from the marginal nitrogen oxide emission reductions expected from air pollution prevention programs.

# 6. Programs to Achieve GCVTC Renewable Energy Goal

Pursuant to 40 CFR 51.309(d)(8)(vi), the submitted BC RH SIP indicates that BC and the State of New Mexico will rely on current renewable energy programs as described in Tables 13 through 17 and Appendix O-O of the RH SIP submittal to demonstrate progress in achieving the renewable energy goal of the GCVTC. The GCVTC's goal is that renewable energy will comprise 10 percent of the regional power needs by 2005 and 20 percent by 2015. BC will submit progress reports in 2013 and 2018, describing Bernalillo County's share of New Mexico's contribution toward meeting the GCVTC renewable energy goals. To the extent that it is not feasible for Bernalillo County to meet its contribution to these goals, BC will identify what measures were implemented to achieve its contribution, and explain why meeting its contribution was not feasible.

#### K. Additional Recommendations

As part of the 1996 GCVTC report to the EPA, Recommendations for Improving

Western Vistas, the Commission included additional recommendations that the EPA did not adopt as part of 40 CFR 51.309. Pursuant to 40 CFR 51.309(d)(9), the submitted BC RH SIP has an evaluation of the additional recommendations of the GCVTC to determine if any of these recommendations could be practicably included in the SIP. These recommendations are listed in Section H of the BC RH SIP. The BC RH SIP includes the determination that no additional measures were practicable or necessary to demonstrate reasonable progress in the SIP. Pursuant to 40 CFR 51.309(d)(9), BC will submit to the EPA a progress report in 2013 and 2018 on the progress toward developing and implementing policy or strategy options recommended in the Commission report. We propose to determine the RH 309 SIP submittal meets the requirements of 40 CFR 51.309(d)(9).

# L. Periodic Implementation Plan Revisions

Pursuant to 40 CFR 51.309(d)(10)(i), section I of the BC RH SIP submittal requires BC to submit to the EPA, as a SIP revision, periodic progress reports for the years 2013 and 2018. The AQCB will assess whether current programs are achieving reasonable progress in Class I areas outside Bernalillo County that are affected by emissions from within Bernalillo County. BC will address the elements listed under 40 CFR 51.309(d)(10)(i)(A) through (G) in the progress reports.

Pursuant to 40 CFR 51.309(d)(10)(ii), the BC RH SIP submittal provides that BC will take one of the following actions based upon information contained in each

periodic progress report. BC will provide a negative declaration statement to the EPA saying that no SIP revision is needed if BC determines reasonable progress is being achieved. If the BC finds that the SIP is inadequate to ensure reasonable progress due to emissions from outside Bernalillo County, BC will notify the EPA and the contributing state(s), and initiate efforts through a regional planning process to address the emissions in question. If BC finds that the SIP is inadequate to ensure reasonable progress due to emissions from another country, BC will notify the EPA and provide information on the impairment being caused by these emissions. If BC finds that the SIP is inadequate to ensure reasonable progress due to emissions from within Bernalillo County, BC will develop emission reduction strategies to address the emissions and revise the SIP no later than one year from the date that the progress report was due. We propose to determine the RH 309 SIP submittal adequately addresses the requirements of 40 CFR 51.309(d)(10) for future progress reports.

#### M. Interstate Coordination

Pursuant to 40 CFR 51.309(d)(11), BC has participated in regional planning and coordination with New Mexico and other states by participating in the WRAP and participating in interstate coordination efforts with the State of New Mexico while developing its emission reduction strategies under 40 CFR 51.309. The backstop trading program in the BC SIP submittal and companion rules involved coordination of the three states (Wyoming, Utah, and New Mexico, including BC) in its development and will continue to involve coordination of the participants once it is

implemented. We propose to determine the submitted RH 309 SIP is consistent with the 40 CFR 51.309(d)(11).

#### N. Additional Class I Areas

The EPA is proposing to find that BC has identified the Class I areas which may be affected by emissions from within Bernalillo County, as required by 40 CFR 51.309(g), which provides a requirement for compliance with 40 CFR 51.308(d) to the extent planning is necessary for areas other than the 16 Class I areas addressed in the 309 SIP. There are no Class I areas within Bernalillo County, therefore BC is not required to identify reasonable progress goals or calculate baseline and natural visibility conditions at any Class I area. However, BC is required to address the apportionment of visibility impact from the emissions generated by sources within Bernalillo County at Class I areas outside of the county borders. There are a total of nine Class I areas within the State of New Mexico that are located close enough to BC that they may plausibly be affected by emissions from Bernalillo County (Table 4), as discussed in Section L of the BC RH SIP submittal.

Table 4 - Class I areas near Bernalillo County

Class I Area	Distance from Bernalillo County (km)
Bandelier Wilderness	83
Bosque del Apache Wilderness	144
Carlsbad Caverns National Park	387
Gila Wilderness	254
Salt Creek Wilderness	274

Wheeler Peak Wilderness and Pecos Wilderness <sup>28</sup>	195
White Mountain Wilderness	266
San Pedro Parks Wilderness Area <sup>29</sup>	106

Pursuant to 40 CFR 51.308(d)(3)(iii), the determinations in the BC RH SIP submittal relied on the technical analysis and emission inventories developed by the WRAP which is documented in the WRAP TSD and available online at the WRAP Technical Support System. 30,31. The WRAP modeled the impacts of emissions from each state on visibility impairment at each Class I area in the West. Emissions were not analyzed on an individual county-level scale so modeling results are not available to quantify the impact of emissions from Bernalillo County on visibility. BC conducted a qualitative analysis based on modeling results for statewide New Mexico emissions that provide information on the impact of New Mexico sources by source category and pollutant, emissions inventory data for individual counties in New Mexico, and weighted emission potential maps. This analysis is summarized in Section L of the BC RH SIP submittal. The full analysis is available as Appendix 2007-H and in the addendum to Appendix 2007-H of the BC RH SIP. BC also prepared an evaluation of emission inventory trends for 2002, 2005, and 2008 for NOx and SO2 emissions for Bernalillo County (Appendix 2010-B of the BC RH SIP).

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<sup>&</sup>lt;sup>28</sup> The IMPROVE monitoring site representing Pecos Wilderness is located near Wheeler Peak Wilderness

<sup>&</sup>lt;sup>29</sup> San Pedro Parks Wilderness Area, located in New Mexico, is one of the 16 Class I areas of the Colorado Plateau The visibility requirements for this area are covered under the Section 309 submittal evaluated in the preceding sections.

<sup>30</sup> http://vista.cira.colostate.edu/tss/

<sup>&</sup>lt;sup>31</sup> EPA's review of the WRAP photochemical modeling is included in the docket, Technical Support Document for Technical Products Prepared by the Western Regional Air Partnership in Support of Western Regional Haze Plans.

The analysis in the BC RH SIP submittal identifies some inaccuracies in the emission inventories used by the WRAP to model the 2002 baseline and the 2018 future case. The 2002 and 2018 emission projections are higher than expected when compared to the reduction in SO<sub>2</sub> emissions observed in the actual emissions inventories for 2002, 2005 and 2008. Bernalillo County's SO<sub>2</sub> emissions estimated by the WRAP for 2002 are approximately 5000 TPY, whereas the actual emissions for SO<sub>2</sub> reported to the EPA for 2002 was only 1574.9 TPY and have decreased significantly to approximately 260 TPY reported for 2008. The 2018 emissions used by the WRAP in the photochemical modeling for BC projected an increase in emissions of approximately 9000 TPY over 2002 emissions. Regardless of the rate of population growth and increase in vehicle miles traveled within Bernalillo County, it is clear that with current low-sulfur fuel regulations such a large increase in emissions is unrealistic. We note that statewide emissions of SO<sub>2</sub> in New Mexico estimated by the WRAP are not projected to increase significantly by 2018, even including the overestimation of Bernalillo County emissions. We also note that Bernalillo County emissions are primarily area and mobile emissions due to its large residential area. The county has no oil and gas development, mining or large EGUs within its boundaries. Similarly, NOx emission estimates used in the WRAP modeling are higher than emissions reported to the EPA. Table 5 shows a comparison of emission data from Bernalillo County (Appendix 2010-B of the BC RH SIP) to emissions included in the WRAP estimates and photochemical modeling.

Table 5 - Comparison of Bernalillo County Emission Estimates to WRAP

	Bernalillo County Emissions (Appendix 2010-B)			WRAP emissions	
	2002	2005	2008	2002	2018
NOx	24930.6	23231.3	13570.9	33856.36	26878.08
SO2	1574.9	1594.9	261.1	4996.01	14073.54

Taking this into account and evaluating Bernalillo County's contribution of emissions to the statewide inventory, BC concluded that it is improbable that Bernalillo County emissions have significant impacts on nearby Class I areas. Bernalillo County's contribution of emissions for NOx and SO2 to the New Mexico emission inventory for 2002, as estimated by the WRAP is 10% of the statewide NOx emissions and 9% of statewide SO2 emissions.

The EPA is proposing to find that BC adequately evaluated the Class I areas that may be impacted by sources of air pollution within Bernalillo County and BC adequately determined that, at this time, it is improbable that sources located within the county cause or contribute to visibility impairment in a Class I area located outside of the county. Furthermore, we propose to accept that visibility impacts at these Class I areas due to area and mobile emission sources in Bernalillo County are overestimated in the WRAP 2002 and 2018 visibility modeling. Emission trends for 2002 through 2008 indicate that emissions of NOx and SO2 within Bernalillo County are declining and therefore visibility impairment due to these emissions are also anticipated to decrease from their current low levels presented in Appendix 2007-H and in the addendum to Appendix 2007-H of the BC RH SIP.

At this time, the qualitative analysis of county-level emission impacts on Class I areas demonstrates that it is not necessary for BC to promulgate additional specific regulations to reduce emissions to address their effect on other Class I areas. BC will rely on current regulations for fugitive dust control, the SO<sub>2</sub> emission milestone and backstop trading program, open burning, motor vehicle inspection, motor vehicle emission standards and other regulations to minimize emissions that could potential impact visibility at other Class I areas, as identified in the BC RH SIP submittal. We therefore propose to find that the BC RH SIP submittal meets the requirements of 40 CFR 51.308(d)(3).

As it does not host a Class I area, BC is not required to develop a monitoring strategy for measuring, characterizing, and reporting regional haze impairment that is representative of Class I areas within the State. However, BC is required to establish procedures by which monitoring data and other information is used to determine the contribution of emissions from within Bernalillo County to regional haze impairment at Class I areas outside of the county and to document the technical basis on which it is relying to determine its apportionment of emission reductions necessary for achieving reasonable progress in each Class I area it affects, as required by 40 CFR 51.308(d)(3)(iii), (d)(4)(ii) and (iii). BC is also required to develop an emissions inventory of pollutants that are reasonably anticipated to cause or contribute to visibility impairment in any Class I area, as required by 40 CFR 51.308(d)(3)(iii) and (d)(4)(v). This inventory must include baseline year emissions, emissions for the most

recent year that data is available, and estimates of future year emissions. The BC RH SIP includes emission inventories for 2002 and 2018 developed by the WRAP as well as actual emission inventories prepared by the State of New Mexico and BC to satisfy 40 CFR 51.308(d)(3)(iii) and (d)(4)(v). BC and the WRAP commit to update the inventory as well as maintain reporting, record keeping and other measures necessary to assess and report on visibility improvements as required by 40 CFR 51.308(d)(4)(v) and (vi). The EPA is proposing to find that BC has met the requirements of 40 CFR 51.308(d)(4) through its participation in the WRAP and coordinated efforts with the State of New Mexico. BC will rely on WRAP technical support to evaluate monitoring data and emissions growth to determine if any future emission reductions are necessary for achieving reasonable progress.

# VI. Our Analysis of City of Albuquerque-Bernalillo County, New Mexico Interstate Visibility Transport SIP Provisions

We are proposing to approve a portion of the SIP revision submitted by the City of Albuquerque/Bernalillo County, New Mexico on July 30, 2007, for the purpose of addressing the "good neighbor" provisions of the CAA section 110(a)(2)(D)(i) for the 1997 8-hour ozone NAAQS and the PM2.5 NAAQS. Section 110(a)(2)(D)(i)(II) of the Act requires that states have a SIP, or submit a SIP revision, containing provisions "prohibiting any source or other type of emission activity within the state from emitting any air pollutant in amounts which will . . . interfere with measures required to be included in the applicable implementation plan for any other State under part C [of the CAA] to protect visibility." Because of the impacts on visibility

from the interstate transport of pollutants, we interpret the "good neighbor" provisions of section 110 of the Act described above as requiring states to include in their SIPs either measures to prohibit emissions that would interfere with the reasonable progress goals set to protect Class I areas in other states, or a demonstration that emissions from Bernalillo County sources and activities will not have the prohibited impacts on other states' existing SIPs.

The BC visibility transport SIP submittal states that it is not possible to assess whether there is any interference with the measures in the applicable SIP for another state designed to protect visibility for the 8-hour ozone and PM2.5 NAAQS until BC submits and the EPA approves BC's RH SIP.

In developing their Regional Haze SIP, BC and potentially impacted States collaborated through the WRAP. Each State developed its Regional Haze Plans and RPGs based on the WRAP modeling and technical analysis. The WRAP modeling was based in part on the emissions reductions each state and BC intended to achieve by 2018. We are proposing to approve the BC RH SIP submittal which includes a demonstration that Bernalillo County sources do not cause or contribute to visibility impairment at Class I areas outside of Bernalillo County. We note that the BC RH SIP includes participation in a SO<sub>2</sub> emission milestone and backstop trading program with the States of New Mexico, Wyoming and Utah, and we propose to find that the BC measures included in the WRAP modeling and relied upon by New Mexico and other States in developing their visibility programs will occur. As previously stated, we are also proposing to agree with BC's determination that it is improbable that sources within Bernalillo County are causing or contributing to visibility impairment at any Class I areas outside the county, which

includes those of the other states. Therefore, we are proposing to approve the City of Albuquerque-Bernalillo County Interstate Transport SIP submittal that addresses the visibility requirement of section 110(a)(2)(D)(i)(II) and find that the BC SIP contains adequate provisions at this time to prohibit emissions from BC sources from interfering with programs in other states to protect visibility.

## VII. The EPA's Conclusions and Proposed Action

The EPA is proposing to approve a City of Albuquerque – Bernalillo County, New Mexico Implementation Plan (SIP) revision submitted on July 28, 2011 addressing the regional haze requirements for the mandatory Class I areas under 40 CFR 51.309. The EPA is proposing that this SIP revision meets the requirements of 40 CFR 51.309. We are proposing to approve all parts of the RH SIP submittal, which adds onto and incorporates earlier regional haze documentation submitted on December 26, 2003 and September 5, 2008. We further propose to approve, as amended, the companion rules, of 20.11.46 NMAC, *Sulfur Dioxide Emission Inventory Requirements; Western Backstop Sulfur Dioxide Trading Program* and 20.11.21 NMAC, *Open Burning* 

We are also proposing to approve a portion of the SIP revision submitted by the City of Albuquerque/Bernalillo County, New Mexico on July 30, 2007, for the purpose of addressing one of the "good neighbor" provisions of the CAA section 110(a)(2)(D)(i) for the 1997 8-hour ozone NAAQS and the PM2.5 NAAQS. This would approve the portion of the SIP that addresses the requirement that the SIP must prevent sources in the state from emitting pollutants

in amounts which will interfere with measures included in the required plans of other states to protect visibility.

As discussed earlier in this notice, the 309 backstop trading program is dependent on the EPA taking final action approving all three participating states' SIP submittals. Until the EPA takes final action on all of the states' SIPs, the backstop trading program will not be effective.

# VIII. Statutory and Executive Order Reviews

Under the Clean Air Act, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the Clean Air Act. Accordingly, this action merely proposes to approve state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this action:

- is not a "significant regulatory action" subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);
- does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.);
- is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 et seq.);
- does not contain any unfunded mandate or significantly or uniquely affect small

- governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- is not subject to requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the Clean Air Act; and
- does not provide the EPA with the discretionary authority to address, as appropriate,
   disproportionate human health or environmental effects, using practicable and legally
   permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, this rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because the SIP is not approved to apply in Indian country located in the state, and the EPA notes that it will not impose substantial direct costs on tribal governments or preempt tribal law.

6560-50-P

List of Subjects in 40 CFR Part 52

Air pollution control, Environmental protection, Intergovernmental relations, Nitrogen dioxide,

Ozone, Particulate matter, Reporting and recordkeeping requirements, Sulfur dioxides, Visibility,

Interstate transport of pollution, Regional haze, Best available control technology.

AUTHORITY: 42 U.S.C. 7401 et seq.

Dated: April 12, 2012

Al Armendariz,

Regional Administrator, Region 6.

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